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Factors Affecting E-Banking Adoption by Greek Consumers

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I hereby declare that the work submitted is mine and that where I have made use of another's work, I have attributed the source(s) according to the Regulations set in the Student's Handbook.

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Abstract

Internet banking is a fairly new innovation. In general, e-banking is a form of new technological application and its use by the public follows, as with anything innovative, certain stages. Since their introduction in 1995, electronic banking services have been used by the banks themselves for internal communication and information exchange. Then, with the development of the internet, electronic banking services began to be used to promote and promote banking products to citizens and businesses. Today, banks can expect several benefits from the use of internet banking since they can minimize their expenses and at the same time, attract more customers. However, there are several factors that can affect consumers' intention to use e-banking services and their investigation is of great importance. Base on that, the current research aims to identify the factors that can affect Greek consumers intention to use internet banking. The research was conducted with the use of a questionnaire which was fulfilled by 141 bank customers and the results showed that the intention to use e-banking is positively connected with perceived enjoyment and perceived ease of use, while on the contrary intention to use e-banking is negatively related with perceived risk.

Keywords: e-banking, adoption, technology acceptance

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Introduction

Starting in the late 1990s, online banking has steadily increased and is a key way of providing services for most banks. When a new innovation emerges, it attracts the attention of consumers to the preference in internet banking due in part to the rapid spread of the Internet and the development of e-commerce. Despite this, little is known about the scope of Internet banking. Internet Banking has been identified as a channel in the context of e-banking services, which, according to Barnett (1998), refers to a combination of the following platforms: a) e-banking, b) phone banking, (c) mobile banking and (d) computer banking. In this paper, emphasis is placed on Internet banking, which has been described as one of the most rapidly growing segments of e-banking (Bennett & Rundle-Thiele, 2004). Electronic banking includes various banking activities that can be carried out by electronic means, from home, businesses or on the road instead of a physical store of a bank (Hoehle, Scornavacca & Huff, 2012). Although e-banking is a bundle of services, the internet has greatly influenced the way electronic banking is conducted (Furnell & Karweni, 1999). The factors that affect the adoption of e-banking are multiple. The intention to use an e-banking service is mainly influenced by the age, the gender, the educational level and the income of the respondents. Additionally, there are factors that determine the use of e-banking. Those factors are: perceived usefulness, perceived ease of use, perceived enjoyment, perceived risk, the perceived feeling of security and privacy, self-efficacy and financial cost.

Banks as organizations can be said to be an important factor in the proper functioning of society, provide vital capital to businesses to fulfill their design, while giving consumers the opportunity to make profits by investing and properly managing these funds. As a result of this process, the banking system participates in social development through capital production and the supply of financial resources (Cheng, Lam, & Yeung, 2006). Larger consumer involvement is required to form bank capital through the deposits they hold in banks (Cheng, Lam, & Yeung, 2006). Customers are more likely to outsource their capital to the most trusted banking service providers, expecting banks to allow them to use and trade their capital the way they want through banking services.

The inadequacy of banking functions can cause great loss of value throughout the economy as the cost of their operations is transferred to the market. Therefore, it is in the broader social interest that banks operate at maximum efficiency. In addition, banks are not only responsible for the movement of capital through the financial system but must do so effectively to maximize the usefulness of capital in the financial system. E-banking is a way to improve the efficiency and effectiveness of banks. E-banking gives the opportunity to the banks to offer a broad range of services to the public with the minimum cost, for both sides. Based on this fact, e-banking can have a positive impact on the economy and it can be considered as even more efficient than the traditional banking services (Okeke, 2014). The extensive use of technology in the banking sector aims to improve efficiency, thus today banks adopt those technological improvement for every part of their operations.

Electronic banking ensures the flow of money across the banking system using a central IT system that is not limited by temporal or spatial constraints and operates at significantly lower costs than other traditional media (Cheng, Lam, & Yeung, 2006). E-banking allows banks to provide their clients with access to their capital around the clock along with a number of other services (Lee, 2009). As a result, customers can have an immediate access to every banking service, any time, from everywhere with the only requirement to be the access on the Internet (Cheng, Lam, & Yeung, 2006). The electronic banking channel provides integrated banking services of high quality that can cause higher customer satisfaction and increasing use of the available services (Beheshti et al., 2012).

The use of the Internet has grown in developing countries as the available infrastructure is upgraded. As a result of this increasing use, public and private organizations make use of the available electronic channels for more efficient delivery of their products and services (Farzianpour, et al., 2014; Usman & Shah, 2013). In this context, electronic transactions are not only characterized by higher efficiency but also offer a set of benefits such as low transaction time, 24-hour access from any geographical point, and a reduction in transaction costs. Through the use of electronic channels, banks and consumers enjoy a set of benefits. In order to benefit from these services, several industries adopt the online service channel. Such a branch is also the banking sector (Zhang et al., 2012). Banks are service-based businesses that provide monetary transactions and other types of services that do not always

require human contact (Nasri & Charfeddine, 2012). Consequently, the advantages of e-banking have made them a key channel for trading, as benefits for consumers, banks and businesses are significant (Masocha et al., 2010). In general, as in any other service sector, the banking sector is dependent on meeting consumer needs and their subsequent satisfaction. In this context, ongoing technological improvements enable banking institutions to attract customers through the highest quality of their services (Martins, Oliveira & Popovic, 2014).

The current dissertation starts with the review of the available literature following by research methodology, data analysis and finally the conclusions.

Chapter 1. Literature Review

1.1. E-Banking

Electronic banking is considered as the process by which a customer performs online banking without physical presence in a bank (Fincen, 2000). Today, e-banking is used to a very large extent, either through computers or through smart mobile phones. Especially the development of smart mobile phones has enabled consumers to carry out banking transactions and manage their account from anywhere (Al-Ghaith et al., 2010). At a global level, there is an increase in the number of consumers using electronic banking services, and with the new technological advances in developing countries, while future estimates indicate a constant increase of this growth (Al-Ghaith et al., 2010).

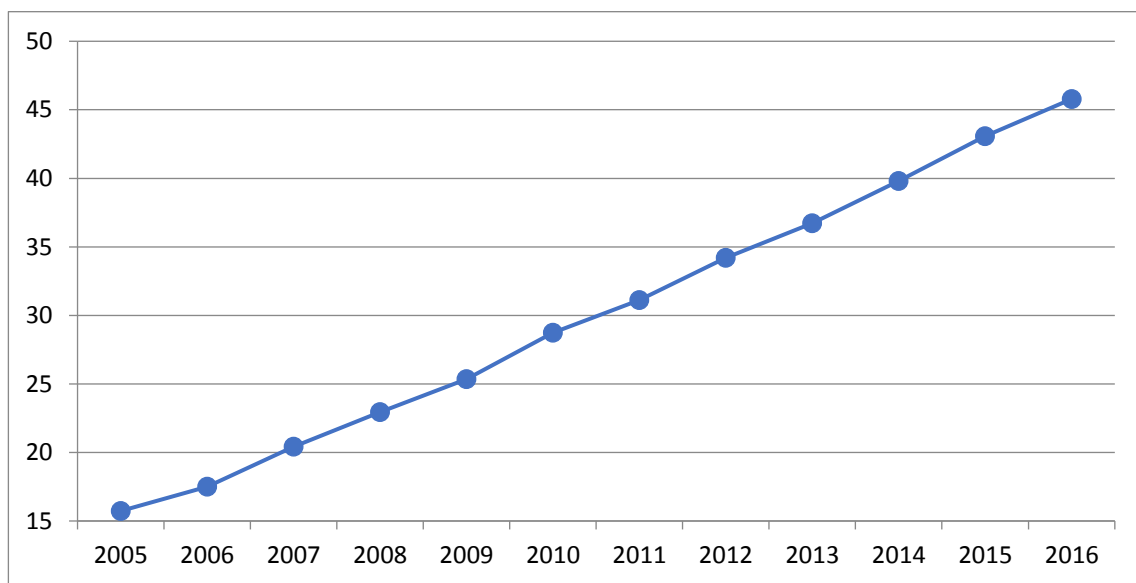


Figure 1.1: Worldwide internet users. Source: World Bank (2016)

At present, technological applications and computing systems are increasingly involved in the interaction and trade between consumers and businesses (Mattila, Karjaluoto & Pento, 2003). New technological applications and new computing systems have changed and continue to change the way banking services are offered, with banks increasingly oriented towards customer satisfaction. In this context, in recent years special attention has been paid to relational marketing practices such as data collection systems and customer relationship

management with the bank. These systems provide managers with information about customer habits and preferences, which, if appropriately exploited, can lead to maximizing their satisfaction (Cheng, Lam & Yeung, 2006).

Thulani et al (2009), and Yibin (2003) distinguish electronic banking services into three groups, group information, communications and transactions.

- Information Services (Websites) - Provide information about the bank.
- Communication / Simple Transactions (Websites) - This e-banking service includes simple transactions such as requests and email exchange.
- Financial transactions - This electronic banking service group includes financial transactions such as transfer of funds and payment of bills.

In general, several definitions have been given regarding electronic banking services. E-Banking includes a wide range of banking functions that customers can execute electronically without having to visit a branch. Therefore, E-Banking consists of a number of different services and technologies.

The concept of electronic banking has been defined in many ways. In particular, Rothanakitumnuai and Speece (2003) designate e-banking as providing banking information and services from banks to customers through different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with the appropriate browser or software. In addition, Floh and Treiblmaier (2006) designate e-banking as the internet gateway through which customers can use different types of banking services, from paying bills to investing, and with the exception of cash withdrawals, banking through the Internet gives customers access to almost any kind of banking transaction at the touch of a button.

1.2. Types of e-banking services

Electronic banking can be divided into three distinct categories in proportion to how they are conducted. Specifically, consumers can use banking services over the Internet, via telephone and electronically via smart mobile phones (Yee-Loong Chong et al., 2010).

When making electronic transactions, bank customers should have the appropriate devices and, they should have access on the internet. In this context, there has been a concern among customers about security of electronic banking, with banks being forced to take extra measures such as input code generators to reduce concern and increase consumer satisfaction.

Additionally, the banking services available through telephone call can be separated into those where the consumer comes in contact with a bank representative in a direct conversation where once the crossover of his or her personal data has solved any problems or questions that may have been answered, and those that the consumer is directed through an electronic system to make simple instructions (Al-Jabri & Sohail, 2012).

Finally, electronic banking services through smart phones are the latest development in electronic banking services, in line with the large increase in the use of smart mobile phones to access the internet (Al-Jabri & Sohail, 2012). Banking organizations have developed specialized applications through which consumers are able to make transactions after entering their personal codes. Lastly, it should be noted that beyond the benefits of e-banking, there are also corresponding risks that need to be taken into account in order to achieve transactions with the highest possible security.

With regard to the types of banking services, banking transactions that can now be made over the internet have increased significantly in recent years and offer them a lasting competitive advantage for banks, which is improving continuously. The available capabilities of electronic banking services are numerous and large in number, and as a result, banking organizations have the ability to choose the best combination that will lead to maximizing customer satisfaction. According to their type, electronic banking is divided into financial, informative, and filing applications (Mattila, Karjaluoto & Pento, 2003). Financial e-Banking services include, inter alia, the transfer of funds from accounts of the same bank, transfers to other banks' accounts, money transfers abroad, and payments of accounts and loans. Information on electronic banking services refer to the provision and exchange of information between the bank and consumers, which strengthens the relationship between them (Angelis, 2005).

Such information may include potential problems, information about new services, information about existing services, and customer account movements. Finally, the submission of applications electronically offers easier access to available banking services, with consumers being able to open a new account in some cases and apply for a loan or credit card.

1.3. Products of Internet Banking

It is a fact that the constant technological developments have a major impact on the evolution of electronic banking services, increasing their number and type. As mentioned earlier, banks seek to differentiate them from competition through the services provided and to meet the needs of their clients as well as possible. The mix of banking services available to citizens and businesses electronically varies from bank to bank. According to Angelis (2005), electronic banking services could be divided into four distinct categories:

- Making financial transactions
- Exchange of information
- Filing and filing applications, and
- The other complementary services

1.3.1. Making financial transactions

Making financial transactions through electronic banking services includes transactions that a customer or business could also make in physical stores. These financial services include in-bank banking, such as account and loan payments, and money transfer between accounts. In particular, according to Angelis (2005), financial transactions could include (Angelis, 2005):

- Transfers within a bank
- Transfers to a third party account
- Domestic and Foreign Remittances
- Payment of loans and credit cards
- Payments to public debts

- Payments of DEKO accounts
- Payments to telephony companies
- Bulk Payments - Payroll

1.3.2. Exchange of information

The exchange of information between the bank and its clients in the form of documents related to banking services can now be largely carried out through electronic channels as well. In addition, the transfer of information greatly affects the overall customer experience of using banking services, so any energy saving time and money creates a positive image for the bank in the eyes of the consumer and can lead to the resumption of transactions and customer retention by the bank (Angelis, 2005). According to Angelis (2005), information exchange and transfer transactions can be divided into four categories (Angelis, 2005):

- Account information
- Information about the cards
- Information about checks
- Information on loans

1.3.3. Completion and submission of applications

Completion and submission of applications and requests to banks until now was only made by the physical stores of banks. Today, e-banking offers banking customers the ability to file requests and requests electronically without losing time. According to Angelis (2005), the types of applications that can be filed electronically are numerous and are constantly increasing, some of them being:

- Opening an account
- The application for a loan
- Request for credit card issuance
- The application for a checkbook

1.3.4. Various complementary services

Beyond the basic services offered through electronic banking, banks additionally provide additional services over the internet in order to best meet the needs of consumers. Such services are electronic investment services as well as e-commerce services such as electronic transactions.

1.4. Factors affect e-banking adoption

The adoption of technology by consumers is influenced by multiple factors and fact that it has been the subject of studies for several years. Continuous research has resulted in the theoretical models presented in Table 1.1 below.

Table 1.1 Models of technology adoption

Theory	Researches	Explanation
The Technology Acceptance Model	Davis (1989)	The TAM model suggests that a person's decision to adopt a technology is influenced by two factors, perceived ease and perceived utility.
Theory of innovation diffusion	Rogers, (2003)	<p>This theory proposes 5 dimensions that help explain the adoption of an innovation: relative advantage, compatibility, complexity, ease of use and observation.</p> <p>According to Orr (2003), the consumer decision consists of 5 steps:</p> <ol style="list-style-type: none"> 1) Knowledge 2) Persuasiveness, 3) Decision 4) Application 5) Confirmation
The Theory of Prospective satisfaction	LaRose et al., (2001)	The use of the internet can be better predicted with the expected benefits than with ease of use

The Technology Acceptance Model (new version)	Davis & Venkatesh (2004),	Expansion of Davis's (1989) TAM.
Theory of Innovation Diffusion (new version)	Xue et al. (2011)	It refers to the influence of socio-economic factors on the adoption of innovation.

Internet banking is a fairly new innovation (Cheng, Lama & Yeung, 2006). Innovation is considered an idea, practice or subject that is new to a person or group of people (Davis, 1989). The perceived reinterpretation of an idea for an individual determines his reaction to it (Davis, 1989). Technology is inherently difficult to manage as it changes constantly, and often in ways that can not be predicted (Lassar, Manolis & Lassar, 2005).

Several theories and models have been developed to explain information systems in terms of social psychology. Rogers (1962) developed innovation diffusion (DOI) or innovation diffusion theory (IDT) to explain why and how people adopt new technologies and the pace at which they do.

Fishbein and Ajzen (1975) propose the Theory of Logic Action (TRA), which has been validated and proven to be successful in explaining the behavior of adopting consumers towards different technology systems. The Davis (1989) Technology Acceptance Model (TAM) is an information system model that shows how users accept and use technology. This model was further developed by Venkatesh and Davis (2000) in the Unified Theory of Acceptance and Use of Technology (UTAUT).

Since their introduction in 1995, electronic banking services have been used by the banks themselves for internal communication and information exchange. Then, with the development of the internet, electronic banking services began to be used to promote and promote banking products to citizens and businesses. The development of technology and the improvement of security systems, their distribution was passed on to the consumer at

first stage with simple transactions and then with complete banking transactions (Furst et al., 2002). Despite the increasing use of e-banking services, there is still a portion of consumers who do not use them for many possible reasons. These reasons and factors that can affect consumers have been the subject of many academic studies. Factors such as ease of use, perceived utility of electronic banking services, Internet access, concern for security of transactions, perceived risk, and compatibility of electronic banking services with the lives of consumers can determine the use of electronic banking services from consumers.

In general, e-banking is a form of new technological application and its use by the public follows, as with anything innovative, certain stages (Benamati & Serva, 2007). In the past, several theoretical approaches have been made regarding the adoption of innovations by consumers. Some of these are Fishbein and Ajzen's reasoned action theory (1975), Ajzen's (1985) pre-planned behavior theory and Roger's theory of diffusion of innovation (1962). According to the latter, the use of technological innovation depends on its specific features such as ease of use and the benefits it offers. Also, particular reference should be made to the technology acceptance model proposed by Davis (1989) and upgraded by several researchers (eg Venkatesh & Davis, 2000). In particular, the model examines when users are willing to use innovation, with perceived ease of use and its utility to affect intent to use (Farzianpour et al., 2014). Perceived utility is related to the expected benefit to the consumer from using the new application and positively affects its adoption (Davis, 1989). Consequently, perceived ease of use refers to the effort the user has to make to use the new application (Sinai & Waldfogel, 2004; Davis, 1989). In particular, for e-banking, their use requires knowledge of computer and internet use, so if a consumer can not use the required applications with ease, he can not use e-banking as well. Still, according to Perez and his associates (2004), the perceived ease of use has a positive correlation with the perceived utility of an innovative application, but also with the intent to use it.

Also, the use of electronic banking services is influenced by consumer self-confidence with regard to their use, with this factor being the most important in determining consumer behavior (Chan & Lu, 2004). Consequently, the demographic characteristics of consumers influence the acceptance of new technology, and in particular with regard to e-banking, it has been found that men are more receptive to women in the use of electronic banking services

(Lauknanen & Pasanen, 2008) younger customers are more likely to use electronic banking services (Barnett, 1998), consumers with greater financial comfort also have a greater chance of using (Burney, 2001; Karjaluoto, 2002), and the higher the level of consumer education, the more likely it is to use electronic banking services (Burney, 2001).

The decision of consumers to use or not to use electronic banking services can be influenced positively or negatively by a number of factors. Negative influence on the choice of consumers to start using electronic banking services is mainly the fear and probability of risk from possible problems that may arise (La Rose et al., 2007). In particular, the risk of using electronic banking services includes dimensions such as financial transaction security, personal data protection, electronic banking performance, absence of face-to-face communication and the use of electronic banking services (Laforet & Li, 2005 Liao & Cheung, 2008). Also, while ease of use of electronic banking services has a positive effect on consumers' decision to use electronic banking services, the difficulty in using and learning of use functions as a negative factor (Dimitriadis & Kyrezis, 2011). Therefore, the more complex electronic banking services, the lower the consumer intent to use (White & Nteli, 2004).

Moreover, the influence of the consumer's intention to use electronic banking services seems to be confident that they have personalities in the use of new technologies in general, with this factor significantly affecting the likelihood of new e-banking by new users (Rotchanakitumnuai & Speece, 2003). Subsequently, some researchers have identified the influence of demographic characteristics and differences between the different groups regarding their intention to use electronic banking services. Such demographic factors are gender where men are more likely to use than women (Lauknanen & Pasanen, 2008), age where older consumers do not feel safe and need to use electronic banking services (Buttner & Goritz, 2008), the level of education where a higher level of education means increased receptivity to new applications and technologies, and finally, the economic level of consumers, with consumers of the highest economic classes having big the need to use electronic banking services (Akinci, Aksoy & Atilgan, 2004).

Finally, as the number of relevant research efforts is high, several factors have been identified that may affect the intent to use electronic banking services by consumers. Such factors are

the reliability of transactions especially in developing countries (Riquelme & Rios, 2010), the difficulty - the complexity of the applications and actions that customers need to carry out (Dimitriadis & Kyrezis, 2011), low confidence in banking institutions (Mattila, Karjalainen & Pento, 2003), the perceptions of trade security (Cheng, Lam & Yeung, 2006) and the likely cost of realization in some countries (Foon & Fah, 2011).

1.5. Perceived risk

According to Mitchell (1999), perceived risk is an important factor affecting a person's decision to conduct transactions over the internet, as individuals are rather more concerned about the possible loss of their money than they are interested in the benefits from electronic transactions. For example, customers will save time doing internet transactions, but threats to security of transactions could act as a deterrent. The potential risk to customers is equal to the amount of money they have in their account or even more. Perceived risk is therefore representative of a person's subjective conviction of the uncertain future within a planned behavior or energy. Perceived risk is mainly associated with future negative results (Ba & Pavlou, 2002).

In some sectors, particularly in the finance and business sectors, the risk is associated with corresponding rewards. In other words, individuals / businesses take risks to receive a reward. Thus, companies that do not take risks cannot expect corresponding rewards. However, in the case of e-banking, customers expect to minimize the risks without affecting rewards. The rewards here are about saving time and cost and the convenience that customers enjoy. On the contrary, in the case of banks, lower operating costs and better customer relationship management are the key benefits.

Perceived risk has a significant negative impact on consumer behavior in e-commerce (Pavlou, 2003). Therefore, it is necessary to reduce the potential perceived risks in order to increase the adoption of this behavior (Belkhamza & Wafa, 2009). There are several factors that lead to an increase in perceived risks in e-commerce. The Internet is based on the perspective of open access and this implies little control over the activity of individuals. Therefore, potential threats can be multiple, especially with regard to money transactions (Ozdemir & Trott, 2009;

Pikkarainen et al, 2004). Most of the bibliography on innovation adoption has been focused on consumers, while less attention has been given to factors hampering the adoption of innovations (Farzianpour et al., 2014; Andrews & Boyle, 2004). While it is easy to identify and compare the quality of tangible products, the quality of the service often depends on the perception of the individual. For example, people are often unsure about the service they will receive even after they pay. Therefore, there are more price fluctuations in services compared to products (Mitchell, 1999). The inherent uncertainty associated with the services combined with the uncertainty associated with the internet leads to a greater perceived risk of online services such as e-banking. These perceptions of risk, however, are not uniform and may depend on both individual and environmental characteristics (Clarke & Flaherty, 2005). Nevertheless, researchers agree that perceived risk is a key determinant of consumer acceptance of new technology (Martins, Oliveira & Popovic, 2014; Lee, 2009). Despite the acceptance by previous researchers that perceived dangers affect the adoption of e-banking services, there is a relative lack of empirical research in this field and especially in the Greek area (Buttner & Göritz, 2008).

Perception is the perspective of a person to see some situations and may be correlated with reality. The perception of risk affects the decisions of individuals in almost all aspects of life and the absurd perception of risk can lead to irrational decision-making. In general, knowledge helps people define the right strategies to respond to opportunities and risks to achieve the ultimate goal of success in what they do. In order to understand people's behavior, it is important to analyze their slogans in verbal and non-verbal behavior (Jones, 1990). The concept of risk in marketing was introduced for the first time by Bauer (1960, Nasri & Charfeddine, 2012). Cunningham (1967, Nasri & Charfeddine, 2012) later developed the concept and defined the perceived risk of a person as the sum of two components in terms of consequences, financial loss, and time consuming, social or other potential damage). Also, some researchers such as Sjöberg (2000) argue that the risk is sometimes related either to the possibility of negative events or to negative consequences rather than a combination of the two. According to most authors, risk perception is higher in the case of services than in the case of goods (Soltanpana et al., 2012; Mitchell & Groatorex, 1993; Lusch et al., 2008), which makes the consumer uncertain about the future (Mitra et al., 1999) and makes access to the service more difficult (Maglio et al., 2006). An empirical study by George

et al. (1985), on the other hand, came to the conclusion that there is no difference between a particular category of goods and the services perceived as perceived risk. However, in another study, Laroche et al. (2003, Pérez-Cabañero, 2007) argued that services do not always have a higher perceived risk than products.

1.6. Pros and Cons of e-banking services

Electronic banking services present a number of benefits for customers and banking institutions that act as positive factors for increasing their use by consumers. Nonetheless, as electronic banking services have benefits for consumers and banks, they also have disadvantages.

According to Aladwani (2001), the provision of faster, easier and more reliable services to customers is the key benefits of the use of e-banking by consumers. In general, the use of any innovation depends on the perception of consumers about the advantages and disadvantages of the user. With regard to the benefits of e-banking for consumers, it can be said that e-banking saves time and money for users, with consumers being able to use e-banking to pay bills or apply for a loan (Riquelme & Rios, 2010). In addition, electronic banking services have facilitated the transfer of money while at the same time reducing the need for visits to the branch (Fonchamnyo, 2013). Consequently, according to Foon and Fah (2011), the use of electronic banking services offers comfort and reduces geographical or national borders in e-commerce and banking. In addition, bank customers through the internet can search for bank products, lending rates, trading terms and choose the provider of their banking services.

Finally, e-banking is an improvement over the traditional banking system as it has reduced transaction costs, improved payment efficiency, financial services and customer-banking relationships (Hoehle, Scornavacca & Huff, 2012). The relationship between electronic banking and service quality can be assessed with the level of customer satisfaction. Customer satisfaction is a function of his expectations and the level of quality of service he actually receives from the bank. E-banking plays a central role in customer satisfaction, as it covers the gap between the expected and the estimated quality of services. Therefore, in order to

fill this gap, banks are looking for ways to make e-services more accessible (Hoehle, Scornavacca & Huff, 2012).

At the same time as consumers, e-banking also offers benefits to banks. In particular, banks can benefit from lower transaction costs, as e-banking requires lower spending on consumables, staff and physical stores (Cheng, 2006). Conducting transactions electronically helps them to be carried out without the assistance of employees, so they can be used in other activities rather than being used in simple functions that can be done electronically. Moreover, e-banking leads to a higher level of satisfaction and customer retention (Oni & Ayo, 2010). In particular, satisfied customers are more difficult to look for an alternative to their banking transactions as their needs are best met. Electronic banking then reduces the time for a loan to be issued, as the borrower's loan application is simultaneously available to all relevant banking departments, reducing bureaucracy and transaction time (Yee-Loong Chong et al., 2010). Finally, e-banking enables banking institutions to access customer information, thus being able to provide integrated service packages that best meet customer needs while increasing the use of e-commerce has also increased bank revenue through the required bank charges (Hoehle, Scornavacca & Huff, 2012).

As mentioned above the advantages for consumers and banks, the use of electronic banking also has disadvantages for the two groups. In particular, banks are called upon to cope with ever-increasing competition, as consumers are able to compare the services offered and choose the one best suited to their needs through free information. (Yee-Loong Chong et al., 2010). In this effort to respond and increase their competitiveness, banks spend resources, both human and financial, on creating new services and promoting their electronic banking services. Then, especially in the initial period of e-banking, banking institutions were required to upgrade available infrastructures and create secure hosting systems for e-banking, which required the investment as well as any upgrading and modernization. Finally, although employees are currently assumed to have at least an average level of computer use, banks will need to spend additional resources in order to provide the best possible information and training of staff regarding electronic banking services at regular intervals (Yee-Loong Chong et al., 2010).

E-banking services are also disadvantageous for themselves as, as reported in a large number of surveys, online banking users are concerned about the security of their transactions and personal information. Also, disadvantage is the reduced computer use of the population as a large part of the consumer audience either does not have access to a computer or does not know how to use electronic banking services (Yee-Loong Chong et al., 2010). Finally, the lack of human contact with bank staff is a disadvantage for a part of consumers such as the elderly, as personal contact enhances the security they feel when doing their transactions.

1.7. Research Justification

The selection of the research topic was made based on the growing importance of e-banking for the Greek market. The growing use of e-banking came mainly as a result of the financial crisis in the country which led to the capital controls that have been applied in the banking sector. The imposition of capital controls has greatly limited the ability of individuals, but also businesses, to perform their daily, money- related activities. The use of the e-banking service has enabled consumers to carry out their banking transactions by minimizing the consequences of capital controls. Apart from that the fast pace of life and the lack of time in the everyday life of citizens led to the adoption of e-banking so that it would save valuable time that would be wasted on waiting for its servicing in a bank branch or another public service in Greece (ex. post office, municipality service etc).

Chapter 2 Research Methodology

The current chapter presents the methodology used to conduct the exploratory research, along with sampling methods, data collection and analysis practices.

Quantitative research using a questionnaire was used to meet the research objectives. Quantitative research has been selected as it enables the researcher to collect a large number of data and examine the relationship that can have specific dimensions between them. Specifically, the overall objective of the survey is to identify the factors that are likely to shape the consumer's intention to use banking services. The factors that will be assessed regarding their impact on consumers' intention are

- perceived enjoyment,
- perceived ease of use,
- perceived usefulness,
- perceived risk,
- compatibility,
- self-efficacy and
- financial cost.

As it mentioned before, this exploratory research aims to add significant outcomes on the research regarding why Greek consumers do not use e-banking services. The results of this research will be useful both for the banks that offer to their clients this kind of service and at the same time for the businesses that use the e-banking and intent to use this service as an additional tool in the effort to develop their commercial activity through e-commerce. Based on the findings from the literature review and the research objectives, the primary research, will answer the following research questions.

1. Which potential e-banking adoption factors affect the intention to use e-banking services?
2. Which are the perceptions of Greek consumers regarding e-banking adoption?
3. Which personal characteristics affect the intention of consumers to use e-banking services?

2.1 Primary Research Procedure

2.1.1 Data collection

The recruitment of participants in the research took place in November 2018. At first, a pilot questionnaire was tested in order to correct any possible mistakes, change unclear questions, feel comfortable with the research process and meet the requirements of the research.

The participants on the pilot research were 10 individuals. The conclusions from the pilot questionnaire were that the questionnaire was fairly long and easy to read and understand, while the researcher was available to answer any potential question that may arise. All questionnaire items were based on previous studies. Specifically, the questionnaire was based on the studies of Dimitriadis & Kyrezis (2011), Lee (2009), and Nissenbanm (2004), with the necessary changes for the Greek population and the specific research questions.

The questionnaires were completed by the respondents hand by hand, a consent form was available in order to receive the consent of the respondents along with an information sheet which informs about the research purpose, the anonymity of the responses and the use of the findings only for the current dissertation. Finally, the researcher was available to answer any potential question as well as it should be noted that the current research follows the ethics standards for primary research.

2.1.2 Data analysis

The data analysis was made with SPSS version 24. Descriptive and Inferential statistical analysis was used to complete the data analysis. Specifically One-way ANOVA and Pearson correlation test were used to examine the differences between the different types of consumers in terms of their characteristics and indicate whether consumers' demographic characteristic affect their perceptions. The choice of the particular statistical analysis was made based on the level of variable measurement. Specifically, One-way ANOVA was selected in order to compare mean of a continuous variable on the categories of a categorical variable, while Pearson was used to assess the relationship between two continuous variables.

In order to test research hypotheses the following control process was used:

H₀: There is no statistically significant differences between the types of influencers

H_A: There is a statistically significant relationship between the types of influencers

The level of significance was $\alpha = 0.05$.

2.2 Sampling and Recruitment

Sampling refers to selecting a number of respondents from the broader set / group of possible sample units (Bryman & Bell, 2015). Generally, sampling process is considered to be successful when the final choice after the data analysis leads to accurate measurements that can be generalized and they are relatively close to the measurements of the broader population (Bryman & Bell, 2015). Research population refers to the part of the wider population that may be involved in the research, as well as on the characteristics of the candidates, which can possibly be selected for sample generation (De Vaus, 2007). In other words, the survey population is the sum of potential respondents who can be selected during the research process (Bryman & Bell, 2015). In the present study, the target population is the Greek citizens (or persons that speak Greek fluently since the questionnaire was only available in Greek). The final research sample was 141 individuals, number that can give reliable information since according to Tabachnick and Fidell (2001, p. 117) and their formula for calculating sample size requirements, the necessary sample was 114 respondents. Based on similar previous studies, the sample size can give reliable information and have a positive impact on external validity. Specifically, Tabachnick and Fidell (2001, p. 117) calculate the needed research sample based on the independent variables and the following equation.

$$N > 50 + 8m$$

N = Necessary sample size

m = number of independent variables.

Moreover, the sample of the quantitative research was consisted by respondents who are fluent in Greek, since the research questionnaires was only available in Greek. The sampling method that was used during the quantitative research was convenience sampling in order to allow the researcher to collect the bigger possible sample at limited time. Therefore, the

characteristics of this research effort (e.g. limited time) were those that in fact determined how the sample will be collected, the choice of the respondents was made on the basis of the ease of access to the sample and it could be described as convenience sampling. This sampling method has advantages as well as disadvantages over other ways of selecting population units. In particular, it offers quick data collection as the researcher actually chooses who will ask, when and where to find them, but on the contrary, it makes it difficult to generalize the results for the whole population (Bryman & Bell, 2015).

Finally, geographically quantitative research was carried out with respondents from all areas of the Prefecture of Macedonia and the choice of the Prefecture was made on the basis of the ease of access to the sample of the survey and the identification of the respondents was made through friends and acquaintances from the social networking pages but also personally in public places.

2.3 Questionnaire Design

The research questionnaire has been used in several previous research efforts and is based on the research by Dimitriadis and Kyrezis (2011). In particular, the questionnaire consists of 2 distinct modules. The first section records the demographics of respondents, especially gender, age, educational level, income, and internet connection. The second module consists of 39 questions that correspond to 8 factors that potentially affect the use of electronic banking services and 4 proposals that assess the intention to use electronic banking services by consumers. The answers of the participants are given by means of a 5-point scale where 1 = I strongly disagree, 2 = I disagree, 3 = I disagree, I do not agree, 4 = Agree and 5 = Agree strongly.

In particular, the factors that affect the use of electronic banking services and assessed through the questionnaire was perceived enjoyment of the use of electronic banking services, the perceived ease of use of electronic banking services, the perceived usefulness of electronic banking services, the perceived risk of using electronic banking services, the compatibility of electronic banking services with the lives of consumers, consumer confidence

in the use of electronic banking services, and the perceived cost of using electronic banking services.

Reliability and validity of the questionnaire

Questionnaire was the data collection tool and it was tested for its validity and reliability.

The fact that the selected variables are based on theoretical analysis confirm the internal validity of the questionnaire. Additionally, the validity of the questionnaire was supported by the presence of the researcher at the section point and the clear form of all the questions. On the contrary, reliability tests whether the questionnaire collects the information that it intends to collect. Reliability is checked through the repeatability of results, while a common method for reliability measurement is the coefficient of internal consistency, alpha (α) of Cronbach. In this case, values over 0.70 indicate reliable scales (Bryman, 2015).

Reliability Statistics

	Cronbach's Alpha	N of Items
Perceived Enjoyment	.632	3
Perceived Ease of Use	.751	5
Perceived Usefulness	.833	7
Perceived Risk	.759	6
Compatibility	.402	2
Self-efficacy	.701	4
Financial cost	.479	2
Intention to use	.581	3

The reliability analysis performed resulted Cronbach Alpha over or close to 0.70 for all constructs therefore the questionnaire can be considered as reliable source of collection information on the research topic.

Chapter 3 Results

3.1. Descriptive Analysis of the Findings

Section 1: Demographic characteristics

- Gender

Regarding the gender of the participants at the primary research (Table 1, Figure 1), 59.6% (84 respondents) were males and 40.4% (57 respondents) females.

Table 1: Gender

	N	%	Valid %	Cumulative %
Male	84	59.6	59.6	59.6
Female	57	40.4	40.4	100.0
Total	141	100.0	100.0	

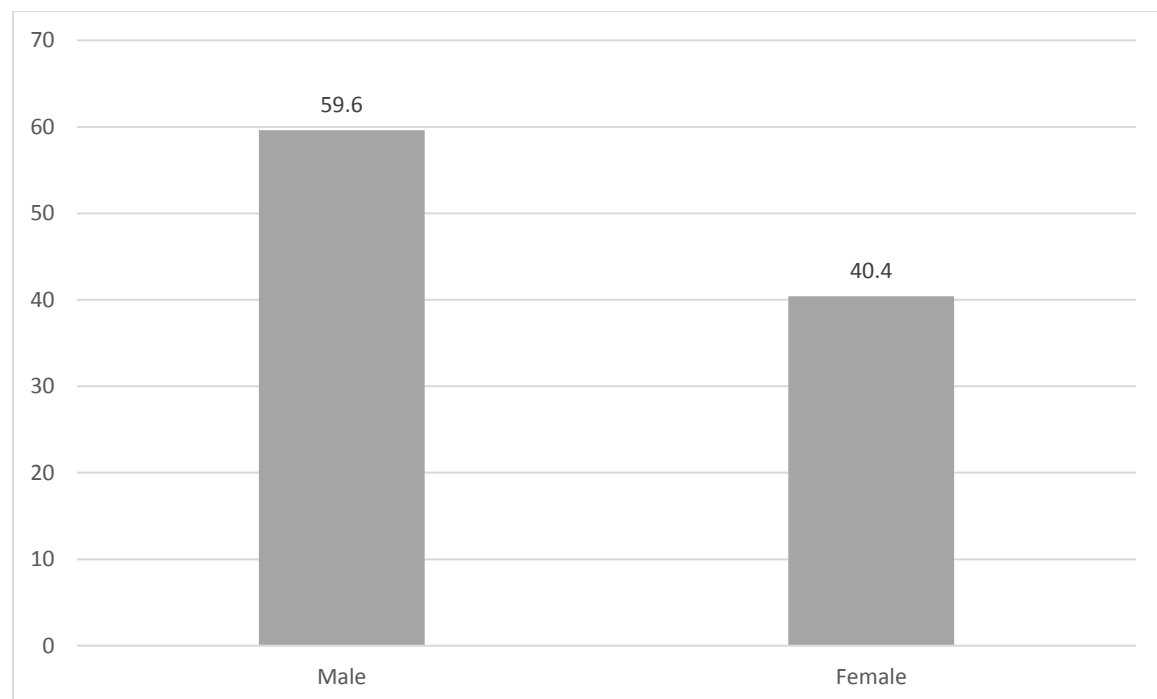


Figure 1: Gender

- Age

Regarding the age of the participants at the primary research (Table 2, Figure 2), the biggest percentage (34%) were from 26 to 30 years old, following by those above 25 years (27.7%), and those between 31 and 45 years old (22.7%), while 15.6% were over 45 years old.

Table 2: Age

	N	%	Valid %	Cumulative %
Under 25 years old	39	27.7	27.7	27.7
26-30 years old	48	34.0	34.0	61.7
31-45 years old	32	22.7	22.7	84.4
Over 45 years old	22	15.6	15.6	100.0
Total	141	100.0	100.0	

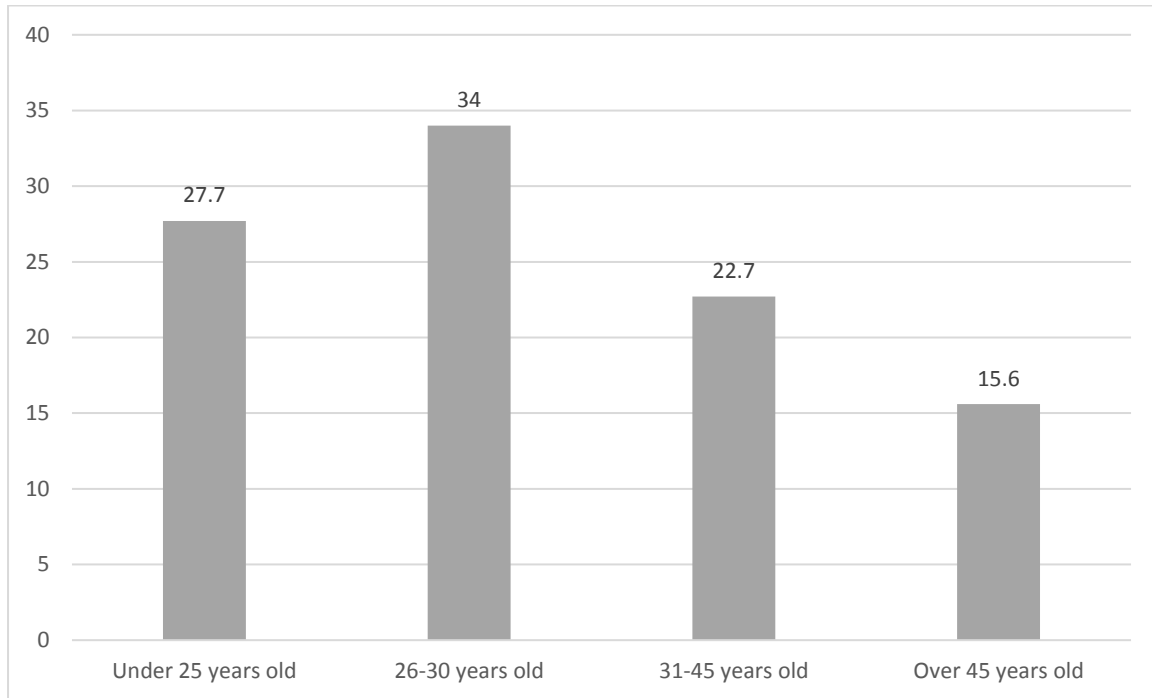


Figure 2: Age

- Educational Level

Regarding the educational level of the participants at the primary research, table 3 and figure 3, show that almost half of the participants (48.9%) have a bachelor degree, 26.2% have a degree from a technical school, 18.4% have finished Lyceum while 6.4% hold a masters or PhD degree.

Table 3: Educational Level

	N	%	Valid %	Cumulative %
Lyceum	26	18.4	18.4	18.4
Technical school	37	26.2	26.2	44.7
Bachelor degree	69	48.9	48.9	93.6
Masters or PhD	9	6.4	6.4	100.0
Total	141	100.0	100.0	

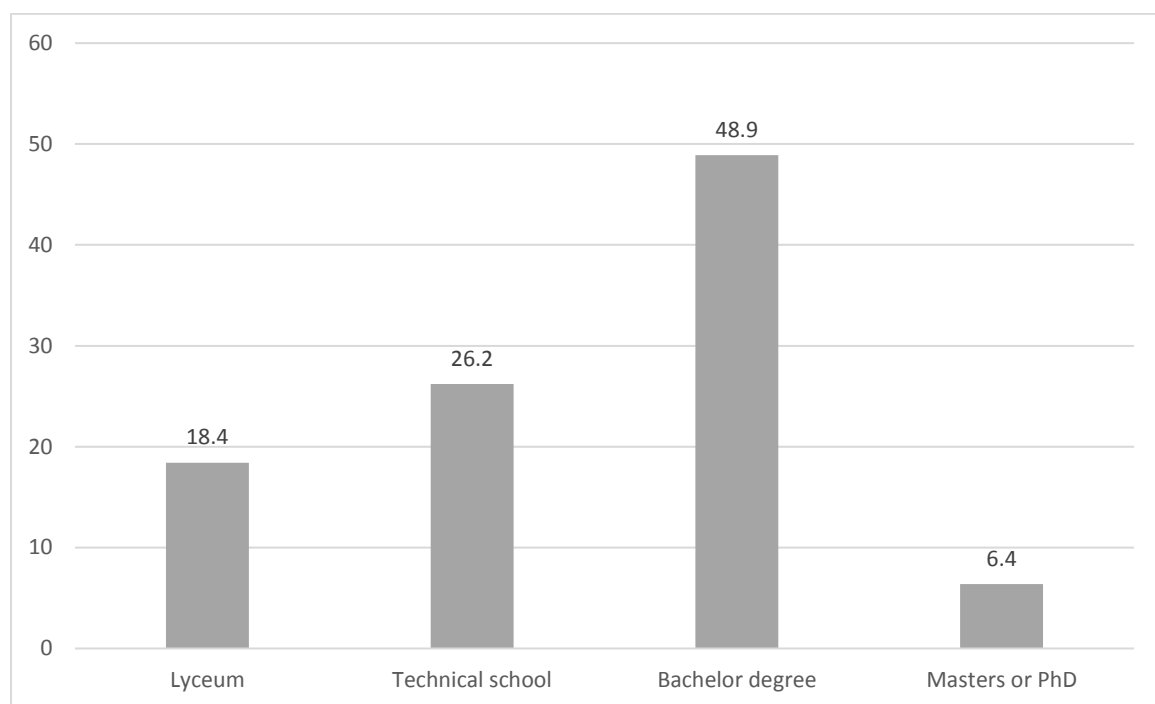


Figure 3: Educational level

- Family Income

Regarding the family income of the participants at the primary research (Table 4, Figure 4), the majority of the sample (47.4%) have a family income between 10.00 and 20.000 euros, while 44% show income lower than 10.000 euros and only 8.5% over 20.000 euros.

Table 4: Family Income

	N	%	Valid %	Cumulative %
Under 10.000 euros	62	44.0	44.0	44.0
From 10.000 to 20.000 euros	67	47.5	47.5	91.5
Over 20.000 euros	12	8.5	8.5	100.0
Total	141	100.0	100.0	

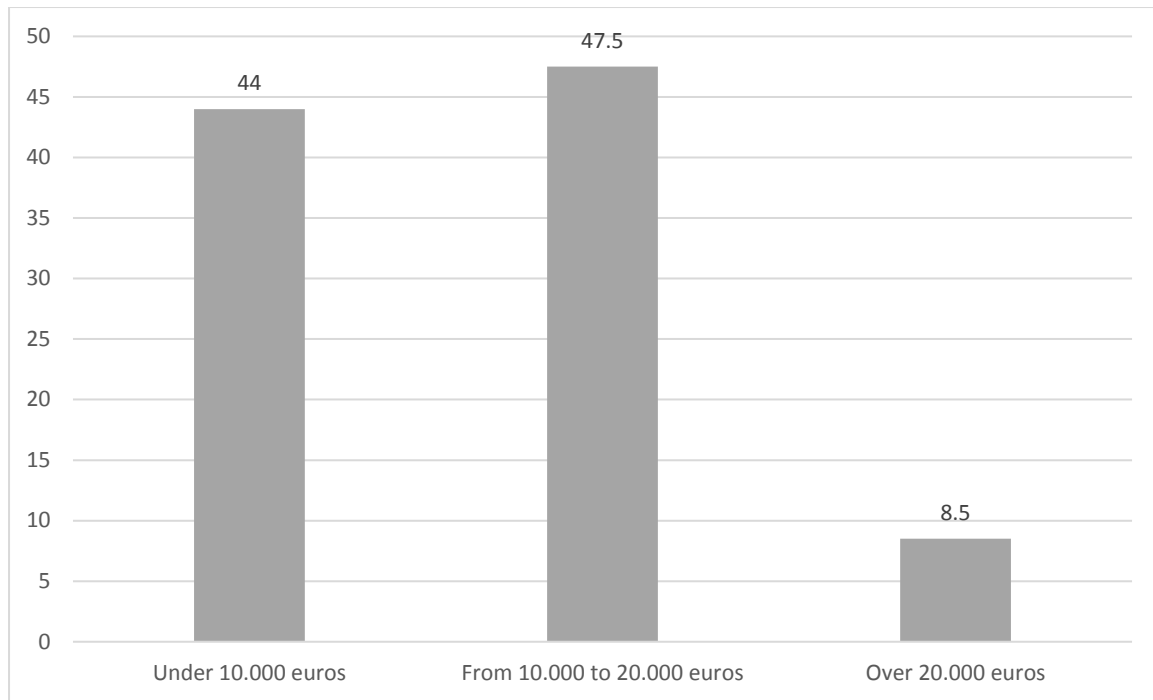


Figure 4: Family Income

Section 2: Perceived Enjoyment

Table 5 and figure 5 show the mean score of the respondents' answers regarding perceived enjoyment. Specifically, consumers indicate that at higher level they would be pleased from the use of e-banking ($M = 3.51$, $SD = 1.15$) as well as that the use of e-banking would be a pleasurable process ($M = 3.34$, $SD = 1.05$). Overall, perceived enjoyment presents a mean of 3.31 ($SD = .993$) and it can be characterized as over the average.

Table 5: Means of Perceived enjoyment

	Mean	SD
Using electronic banking services offers me pleasure	3.5177	1.15017
The use of electronic banking services is a pleasant process.	3.3475	1.05550
Using electronic banking services is fun for me	3.0780	1.18966
Total perceived enjoyment	3.3144	.99345

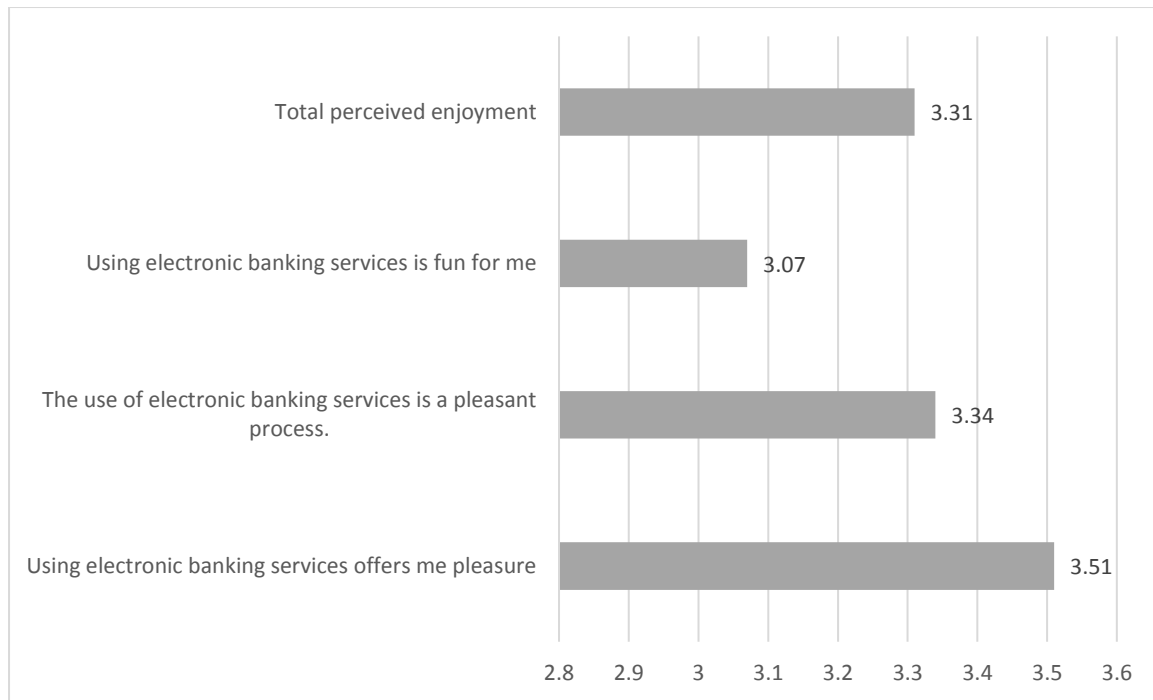


Figure 5

- Using electronic banking services offers me pleasure

Table 6 and figure 6 show the percentages of the respondents' answers regarding the statement "Using electronic banking services offers me pleasure". Specifically, 48.9% state their agreement with the statement.

Table 6: Using electronic banking services offers me pleasure

	N	%	Valid %	Cumulative %
1 (SD)	7	5.0	5.0	5.0
2 (D)	18	12.8	12.8	17.7
3 (NA, ND)	47	33.3	33.3	51.1
4 (A)	33	23.4	23.4	74.5
5 (SA)	36	25.5	25.5	100.0
Sum	141	100.0	100.0	

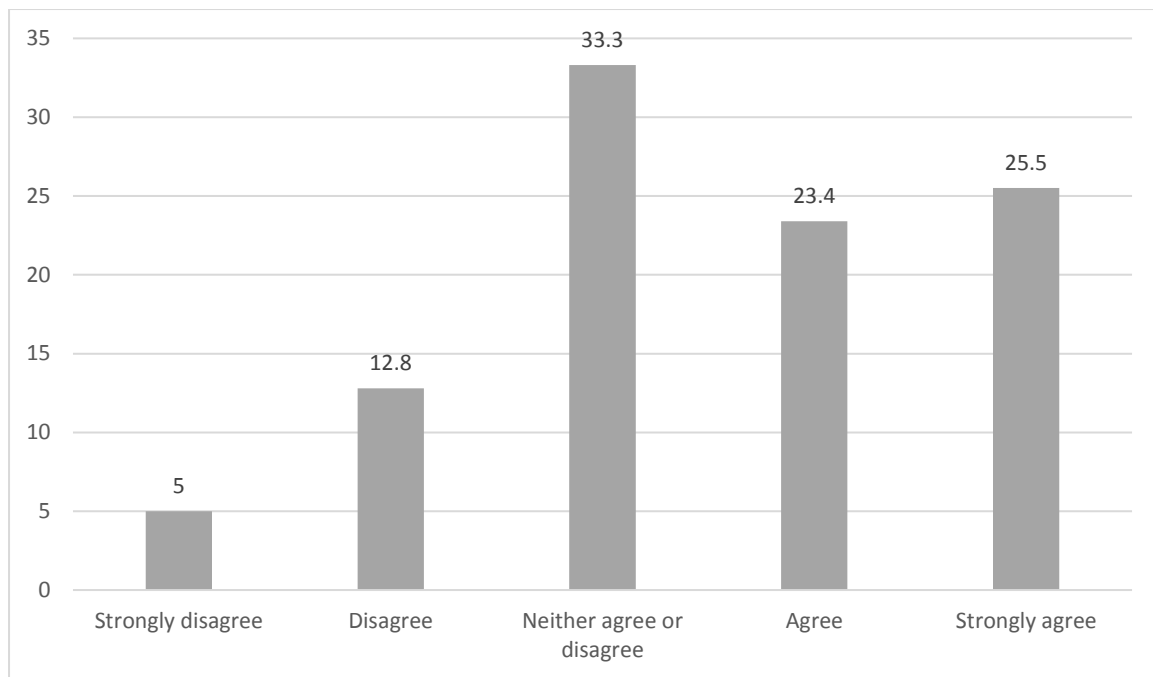


Figure 6: Using electronic banking services offers me pleasure

- The use of electronic banking services is a pleasant process.

Table 7 and figure 7 show the percentages of the respondents' answers regarding the statement "The use of electronic banking services is a pleasant process". Specifically, 41.2% state their agreement with the statement.

Table 7: The use of electronic banking services is a pleasant process.

	N	%	Valid %	Cumulative %
1 (SD)	7	5.0	5.0	5.0
2 (D)	18	12.8	12.8	17.7
3 (NA, ND)	58	41.1	41.1	58.9
4 (A)	35	24.8	24.8	83.7
5 (SA)	23	16.3	16.3	100.0
Sum	141	100.0	100.0	

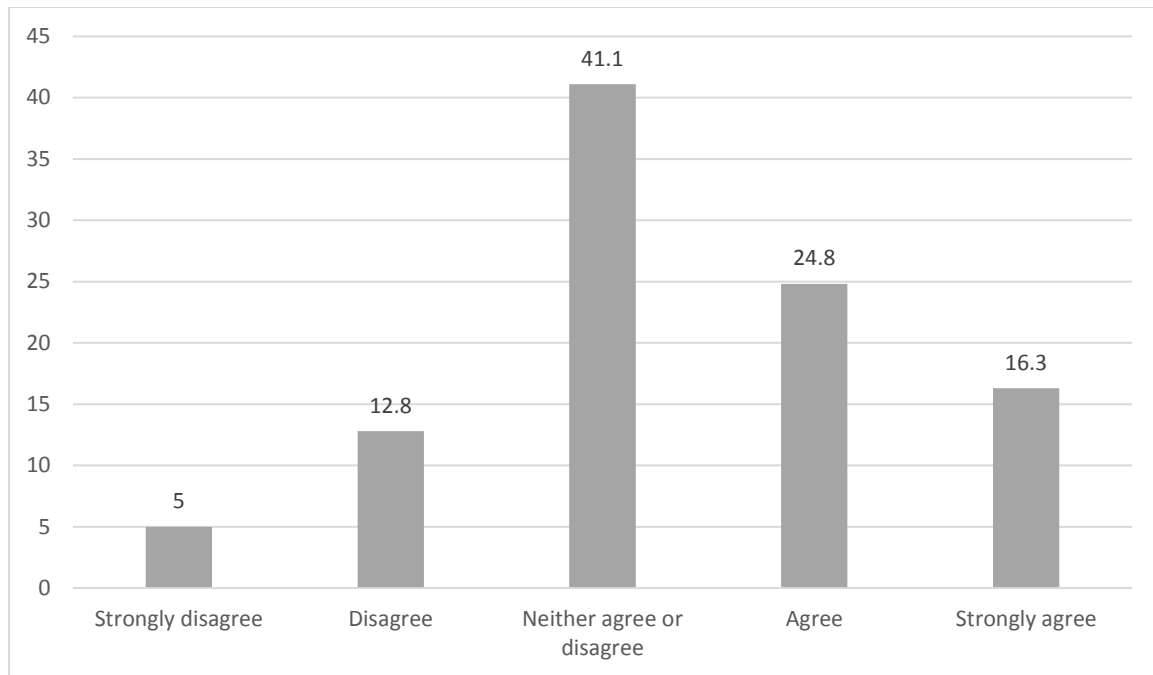


Figure 7: The use of electronic banking services is a pleasant process

➤ Using electronic banking services is fun for me

Table 8 and figure 8 show the percentages of the respondents' answers regarding the statement "Using electronic banking services is fun for me". Specifically, 31.9% state their agreement with the statement.

Table 8: Using electronic banking services is fun for me

	N	%	Valid %	Cumulative %
1 (SD)	16	11.3	11.3	11.3
2 (D)	24	17.0	17.0	28.4
3 (NA, ND)	56	39.7	39.7	68.1
4 (A)	23	16.3	16.3	84.4
5 (SA)	22	15.6	15.6	100.0
Sum	141	100.0	100.0	

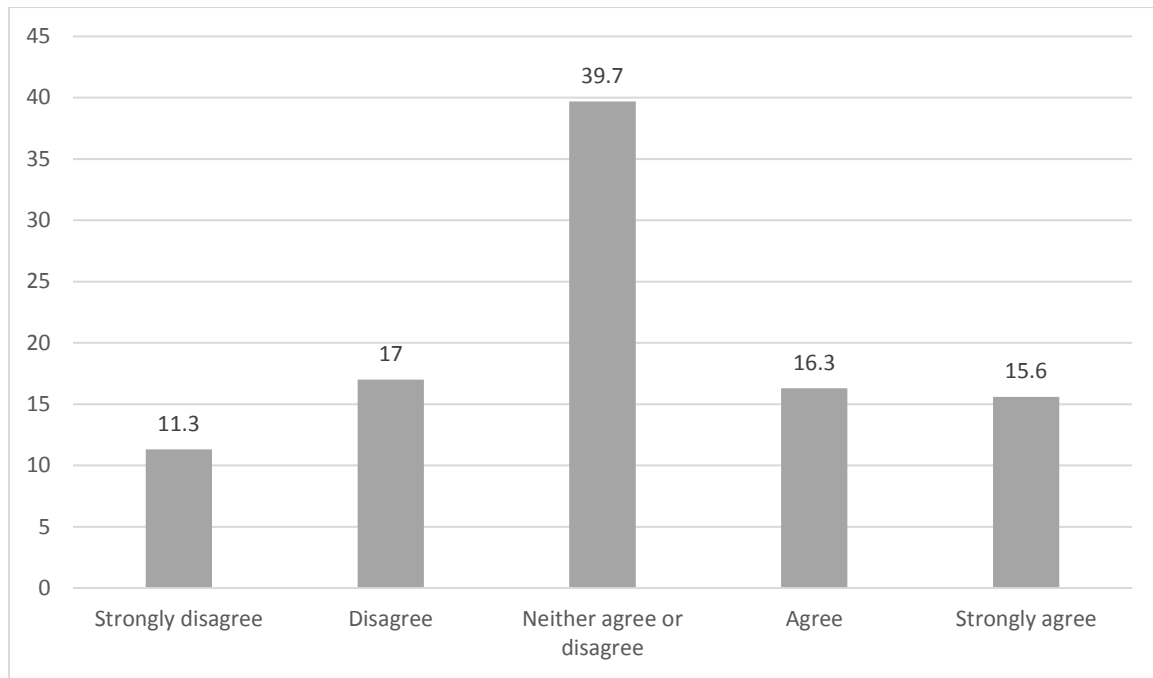


Figure 8: Using electronic banking services is fun for me

Section 3: Perceived Ease of Use

Table 9 and Figure 9 show the mean score of the respondents' answers regarding perceived ease of use. Specifically, consumers indicate that at higher level they believe that it is easy to remember how to use e-banking ($M = 3.78$, $SD = 1.05$) as well as that they believe that e-banking is easy to use ($M = 3.57$, $SD = 1.20$). Overall, perceived ease of use presents a mean of 3.34 ($SD = .604$) and it can be characterized as over the average.

Table 9: Means of Perceived ease of use

	Mean	SD
For the use of electronic banking services, I need specific skills that I can easily get.	2.4681	1.13737
The functions of electronic banking services are easy to learn	3.3901	1.22925
The benefits of using electronic banking services are easy to obtain	3.4894	1.02551
How to use electronic banking services is easily recalled in my memory	3.7872	1.05430
The use of electronic banking services is generally easy	3.5745	1.20258

Total ease of use	3.3418	.60453
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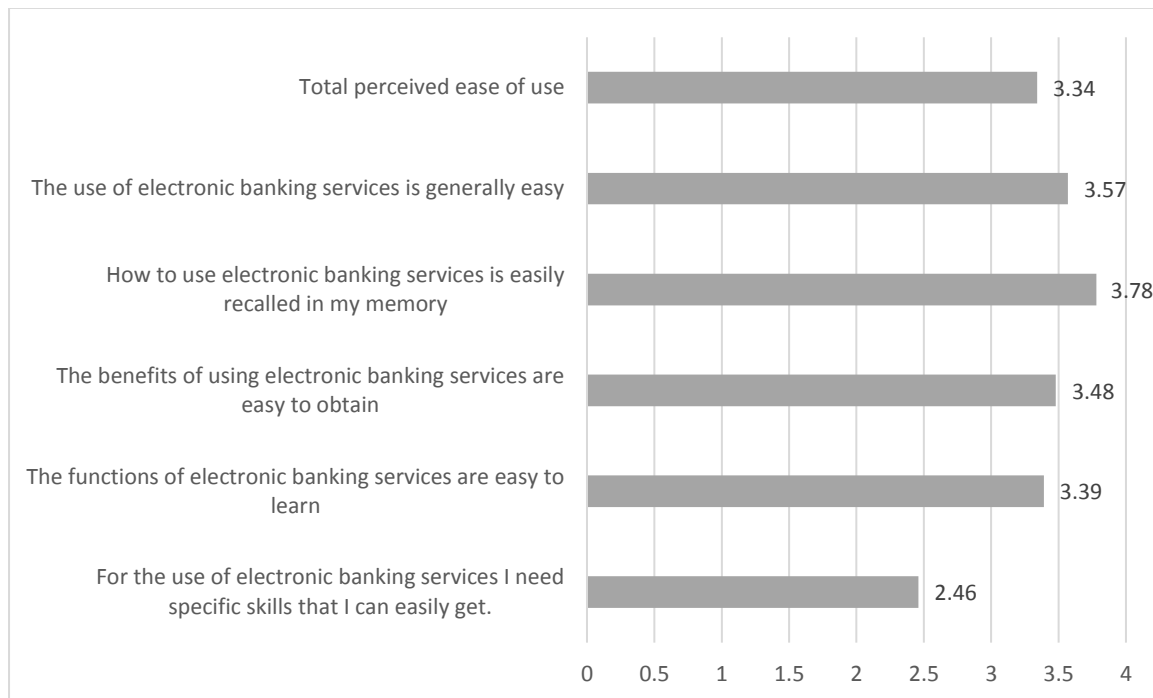


Figure 9

- For the use of electronic banking services, I need specific skills that I can easily get

Table 10 and figure 10 show the percentages of the respondents' answers regarding the statement "For the use of electronic banking services I need specific skills that I can easily get". Specifically, 58% state their disagreement with the statement.

Table 10: For the use of electronic banking services I need specific skills that I can easily get

	N	%	Valid %	Cumulative %
1 (SD)	31	22.0	22.0	22.0
2 (D)	48	34.0	34.0	56.0
3 (NA, ND)	34	24.1	24.1	80.1
4 (A)	21	14.9	14.9	95.0
5 (SA)	7	5.0	5.0	100.0
Sum	141	100.0	100.0	

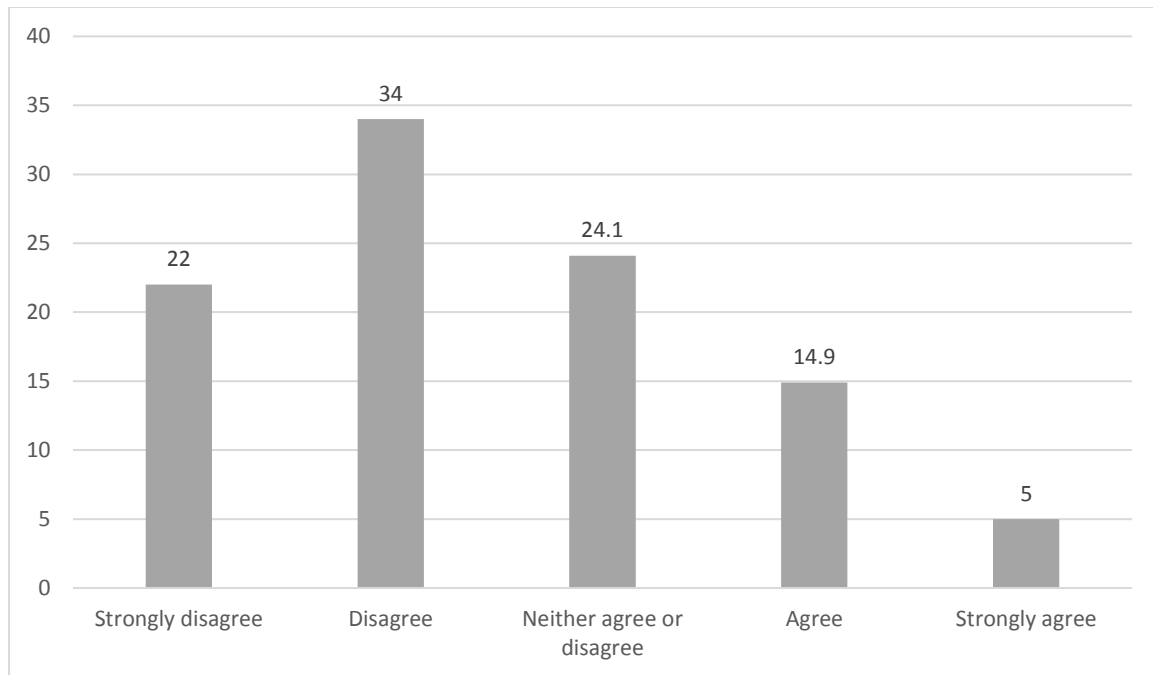


Figure 10: For the use of electronic banking services I need specific skills that I can easily get

- The functions of electronic banking services are easy to learn

Table 11 and figure 11 show the percentages of the respondents' answers regarding the statement "The functions of electronic banking services are easy to learn". Specifically, 53.1% state their agreement with the statement.

Table 11: The functions of electronic banking services are easy to learn

	N	%	Valid %	Cumulative %
1 (SD)	15	10.6	10.6	10.6
2 (D)	17	12.1	12.1	22.7
3 (NA, ND)	34	24.1	24.1	46.8
4 (A)	48	34.0	34.0	80.9
5 (SA)	27	19.1	19.1	100.0
Sum	141	100.0	100.0	

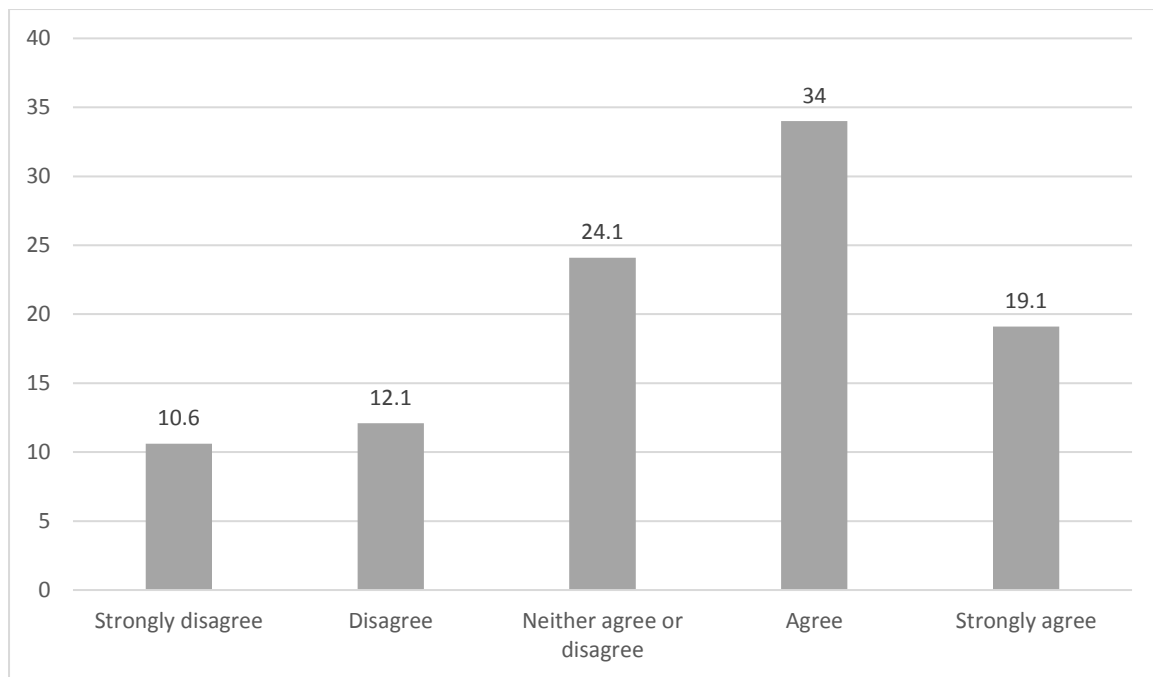


Figure 11: The functions of electronic banking services are easy to learn

- The benefits of using electronic banking services are easy to obtain.

Table 12 and figure 12 show the percentages of the respondents' answers regarding the statement "The benefits of using electronic banking services are easy to obtain". Specifically, 50.3% state their agreement with the statement.

Table 12: The benefits of using electronic banking services are easy to obtain.

	N	%	Valid %	Cumulative %
1 (SD)	8	5.7	5.7	5.7
2 (D)	9	6.4	6.4	12.1
3 (NA, ND)	53	37.6	37.6	49.6
4 (A)	48	34.0	34.0	83.7
5 (SA)	23	16.3	16.3	100.0
Sum	141	100.0	100.0	

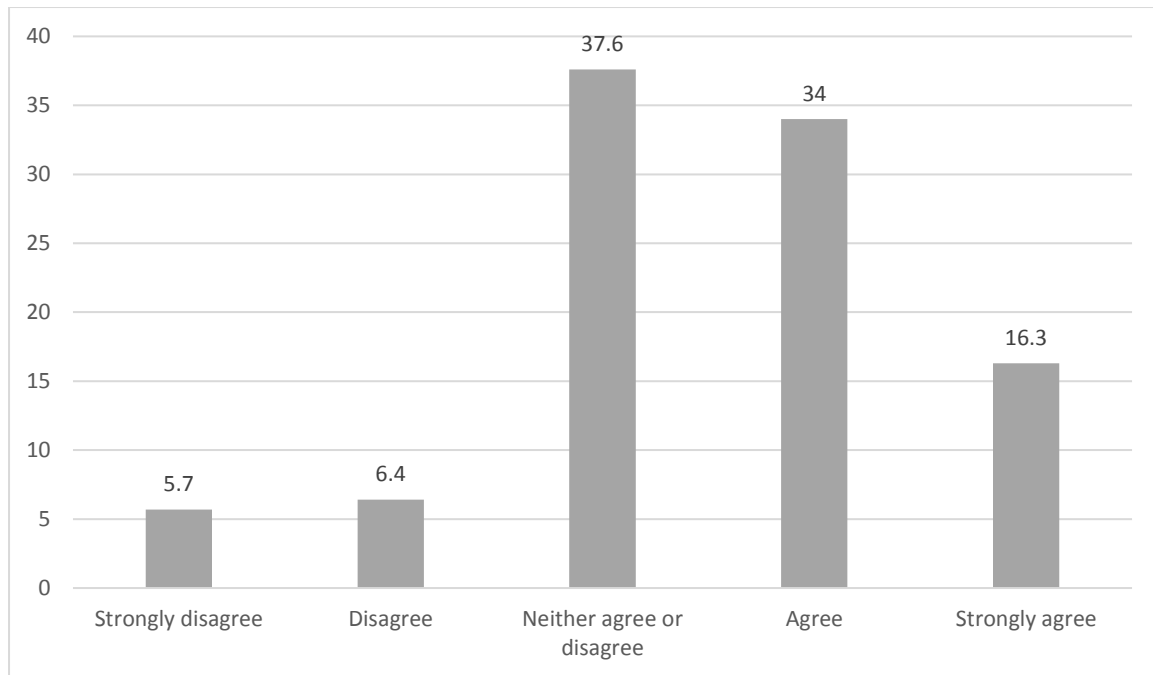


Figure 12: The benefits of using electronic banking services are easy to obtain.

➤ How to use electronic banking services is easily recalled in my memory

Table 13 and figure 13 show the percentages of the respondents' answers regarding the statement "How to use electronic banking services is easily recalled in my memory". Specifically, 72.3% state their agreement with the statement.

Table 13: How to use electronic banking services is easily recalled in my memory

	N	%	Valid %	Cumulative %
1 (SD)	7	5.0	5.0	5.0
2 (D)	11	7.8	7.8	12.8
3 (NA, ND)	21	14.9	14.9	27.7
4 (A)	68	48.2	48.2	75.9
5 (SA)	34	24.1	24.1	100.0
Sum	141	100.0	100.0	

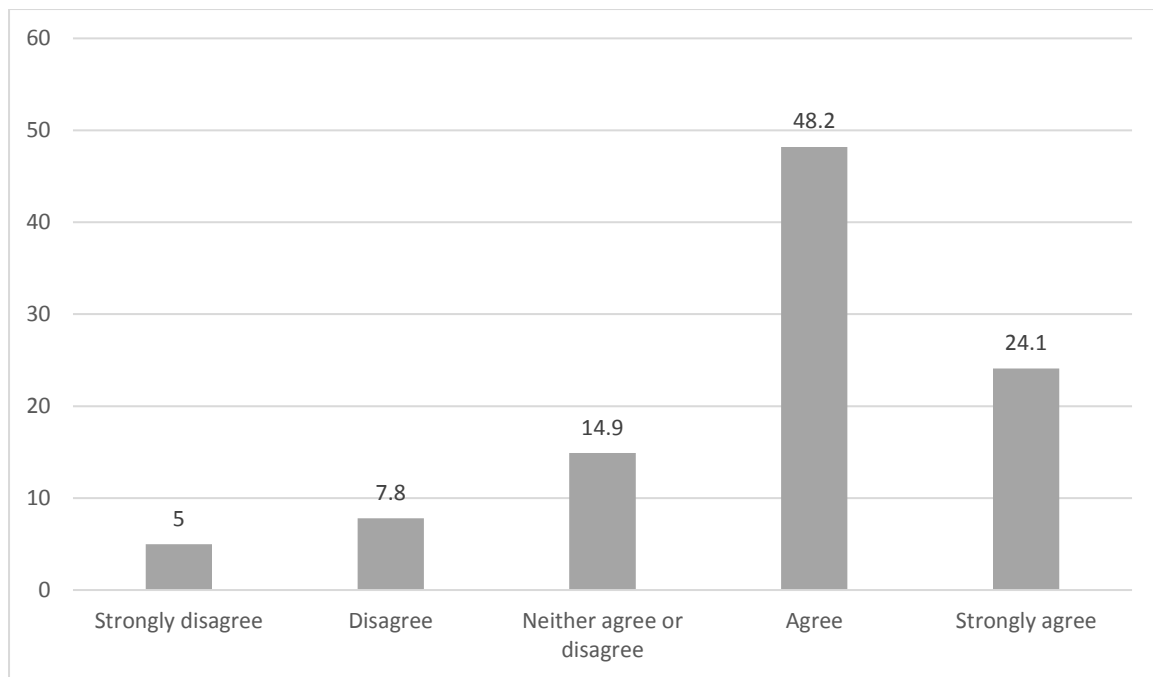


Figure 13: How to use electronic banking services is easily recalled in my memory

➤ The use of electronic banking services is generally easy

Table 14 and figure 14 show the percentages of the respondents' answers regarding the statement "The use of electronic banking services is generally easy". Specifically, 56.8% state their agreement with the statement.

Table 14: The use of electronic banking services is generally easy

	N	%	Valid %	Cumulative %
1 (SD)	7	5.0	5.0	5.0
2 (D)	24	17.0	17.0	22.0
3 (NA, ND)	30	21.3	21.3	43.3
4 (A)	41	29.1	29.1	72.3
5 (SA)	39	27.7	27.7	100.0
Sum	141	100.0	100.0	

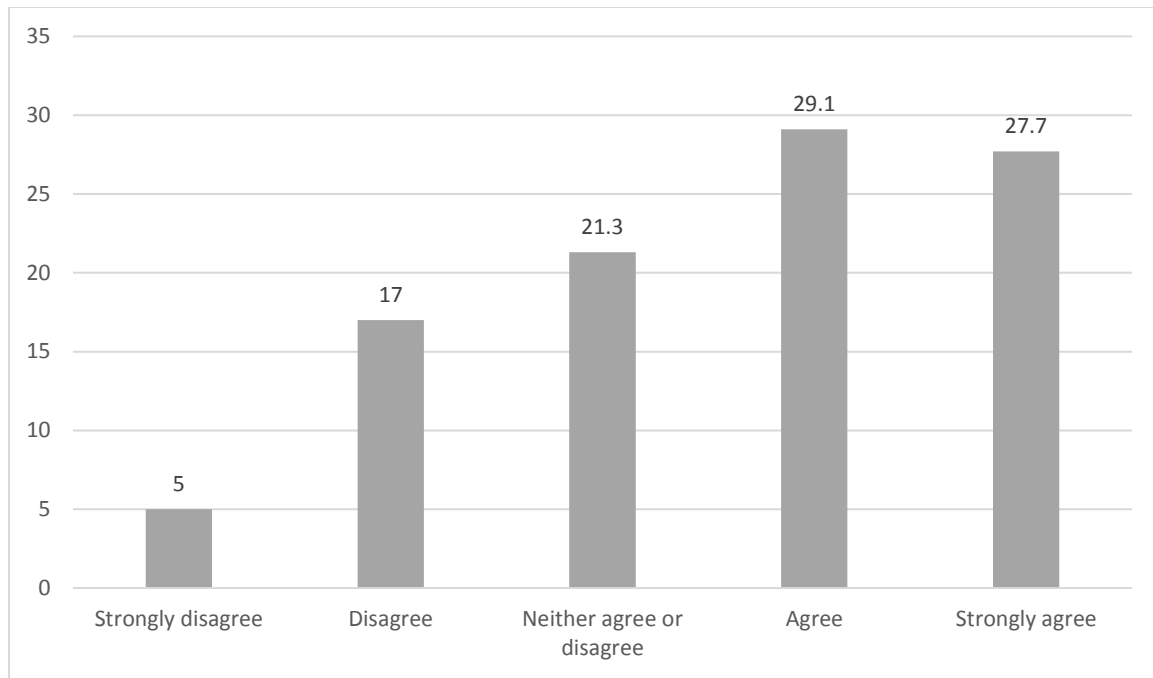


Figure 14: The use of electronic banking services is generally easy

Section 4: Perceived Usefulness

Table 15 show the mean score of the respondents' answers regarding perceived usefulness. Specifically, consumers indicate that at higher level they believe that e-banking enables them to complete their banking activities conveniently ($M = 4.33$, $SD = .743$) as well as that e-banking helps them on their daily life ($M = 3.80$, $SD = .979$). Overall, perceived usefulness presents a mean of 3.76 ($SD = .472$) and it can be characterized as over the average.

Table 15: Means of Perceived usefulness

	Mean	SD
The use of electronic banking services facilitates my day-to-day activities.	3.8014	.97994
I believe that the use of electronic banking services is helpful	3.6809	1.12326
I believe that the use of electronic banking services is beneficial.	3.5035	1.31271
I believe that the use of electronic banking services facilitates transactions with the bank I cooperate with.	3.7589	1.22999
I consider that the use of electronic banking services greatly reduces the time of transactions with the bank	3.6312	1.34913

I believe that the use of electronic banking makes my transactions with the bank more convenient.	4.3333	.74322
I believe that the use of electronic banking has made my collaboration with the bank more efficient	3.6454	1.26567
Total perceived usefulness	3.7649	.47261

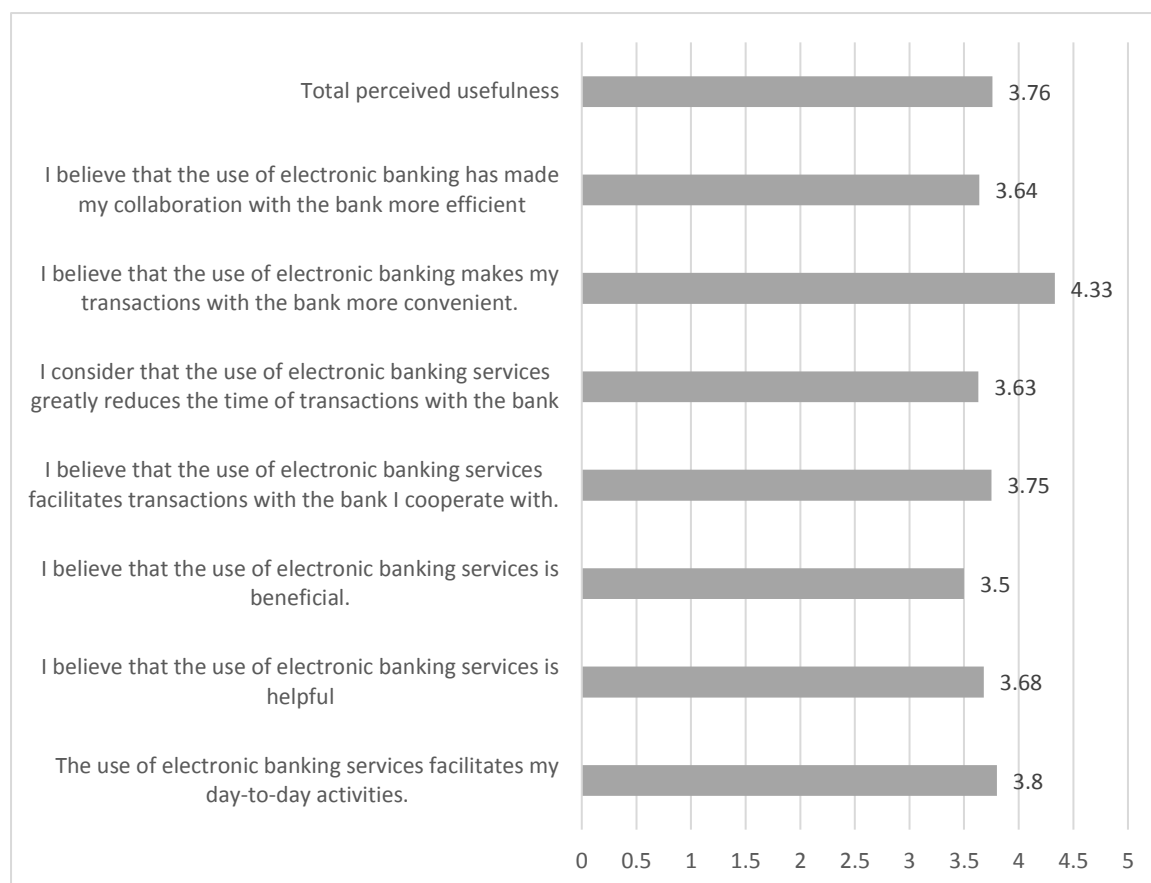


Figure 15

- The use of electronic banking services facilitates my day-to-day activities

Table 16 and figure 16 show the percentages of the respondents' answers regarding the statement "The use of electronic banking services facilitates my day-to-day activities". Specifically, 70.2% state their agreement with the statement.

Table 16: The use of electronic banking services facilitates my day-to-day activities

	N	%	Valid %	Cumulative %
1 (SD)	4	2.8	2.8	2.8
2 (D)	11	7.8	7.8	10.6
3 (NA, ND)	27	19.1	19.1	29.8

4 (A)	66	46.8	46.8	76.6
5 (SA)	33	23.4	23.4	100.0
Sum	141	100.0	100.0	

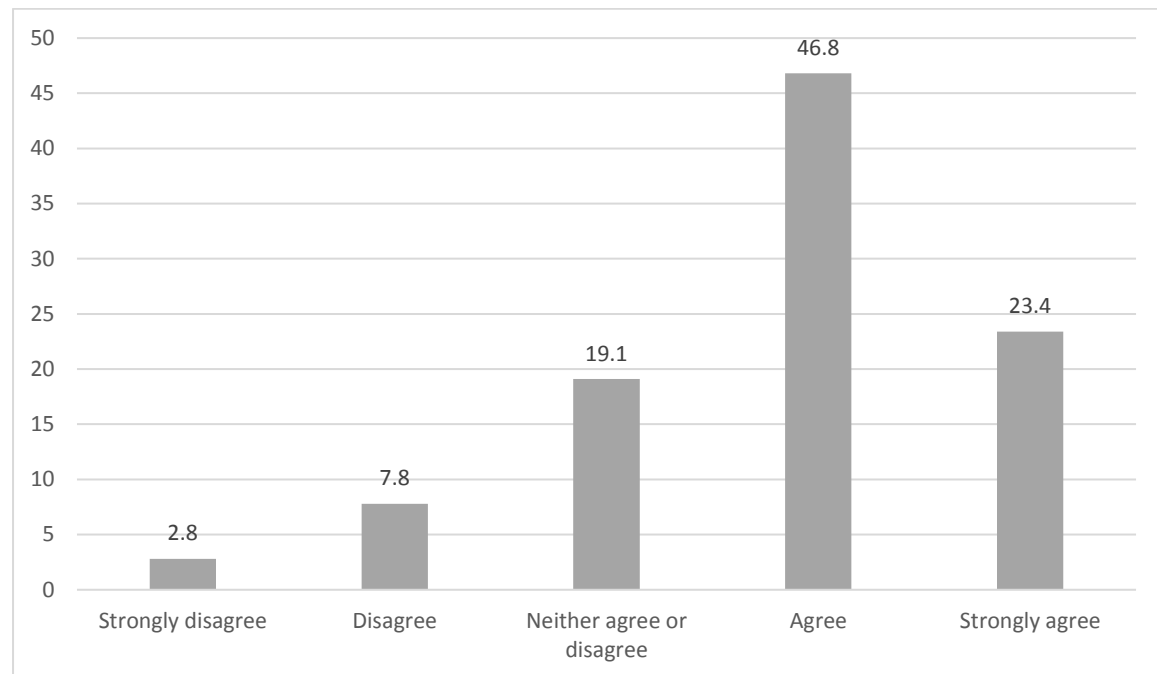


Figure 16: The use of electronic banking services facilitates my day-to-day activities

➤ I believe that the use of electronic banking services is helpful

Table 17 and figure 17 show the percentages of the respondents' answers regarding the statement "I believe that the use of electronic banking services is helpful". Specifically, 61% state their agreement with the statement.

Table 17: I believe that the use of electronic banking services is helpful

	N	%	Valid %	Cumulative %
1 (SD)	1	.7	.7	.7
2 (D)	29	20.6	20.6	21.3
3 (NA, ND)	25	17.7	17.7	39.0
4 (A)	45	31.9	31.9	70.9
5 (SA)	41	29.1	29.1	100.0
Sum	141	100.0	100.0	

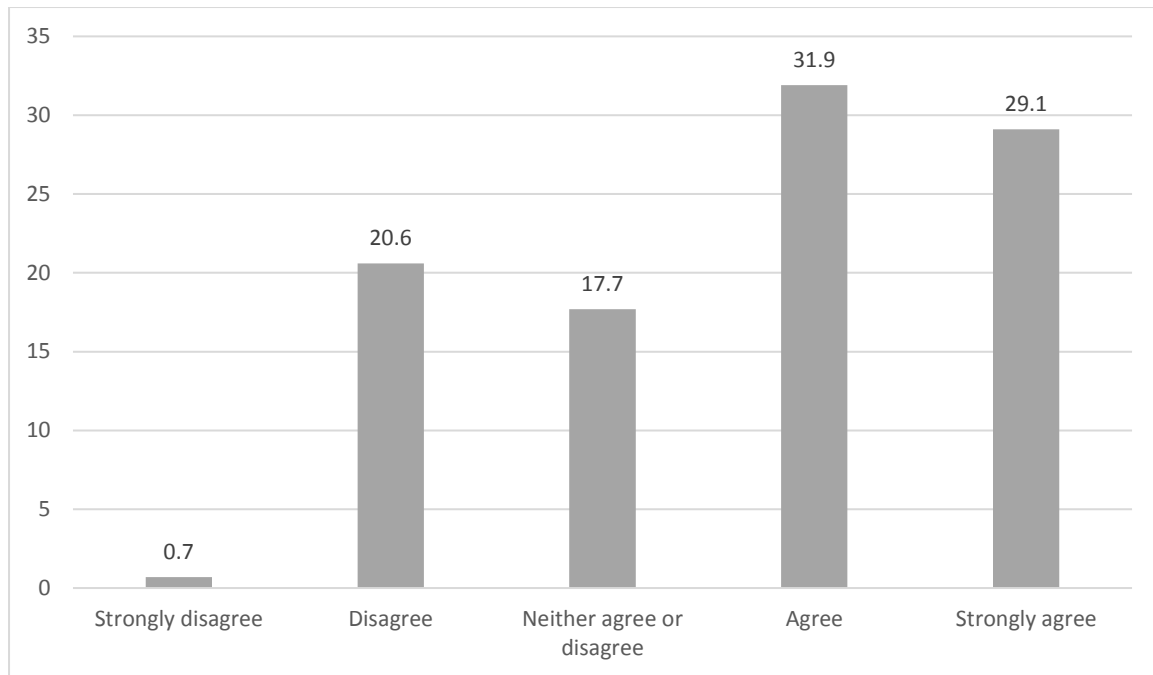


Figure 17: I believe that the use of electronic banking services is helpful

➤ I believe that the use of electronic banking services is beneficial

Table 18 and figure 18 show the percentages of the respondents' answers regarding the statement "I believe that the use of electronic banking services is beneficial". Specifically, 50.3% state their agreement with the statement.

Table 18: I believe that the use of electronic banking services is beneficial

	N	%	Valid %	Cumulative %
1 (SD)	9	6.4	6.4	6.4
2 (D)	29	20.6	20.6	27.0
3 (NA, ND)	32	22.7	22.7	49.6
4 (A)	24	17.0	17.0	66.7
5 (SA)	47	33.3	33.3	100.0
Sum	141	100.0	100.0	

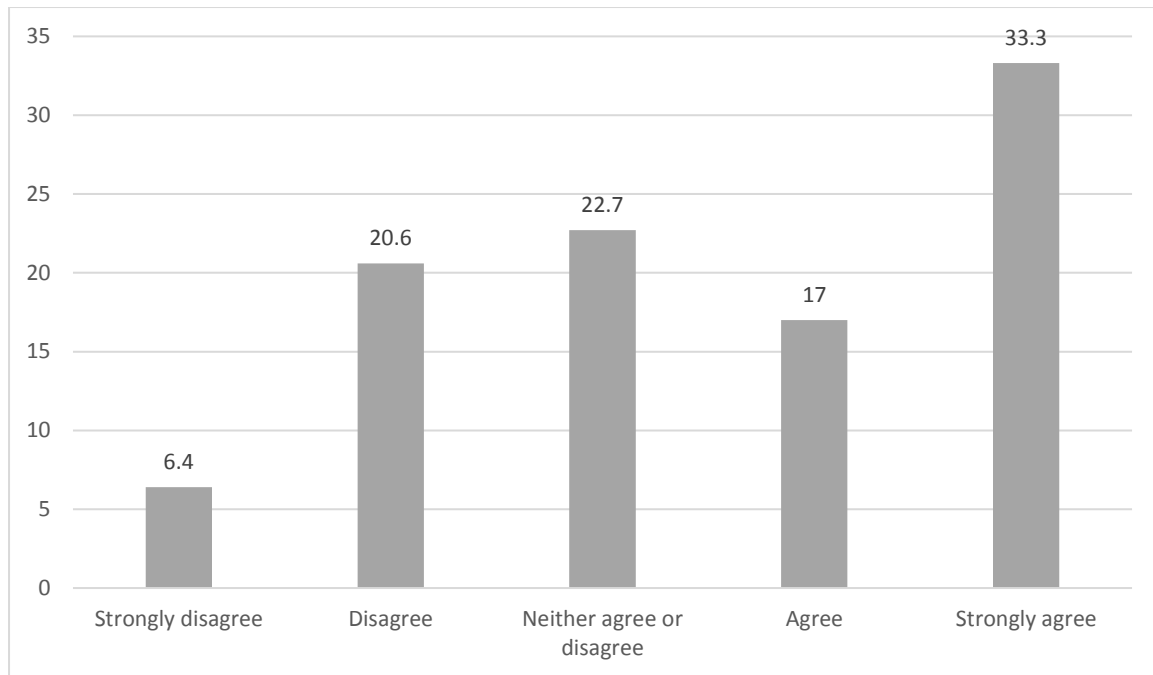


Figure 18: I believe that the use of electronic banking services is beneficial

- I believe that the use of electronic banking services facilitates transactions with the bank I cooperate with

Table 19 and figure 19 show the percentages of the respondents' answers regarding the statement "I believe that the use of electronic banking services facilitates transactions with the bank I cooperate with". Specifically, 66% state their agreement with the statement.

Table 19: I believe that the use of electronic banking services facilitates transactions with the bank I cooperate with

	N	%	Valid %	Cumulative %
1 (SD)	7	5.0	5.0	5.0
2 (D)	22	15.6	15.6	20.6
3 (NA, ND)	19	13.5	13.5	34.0
4 (A)	43	30.5	30.5	64.5
5 (SA)	50	35.5	35.5	100.0
Sum	141	100.0	100.0	

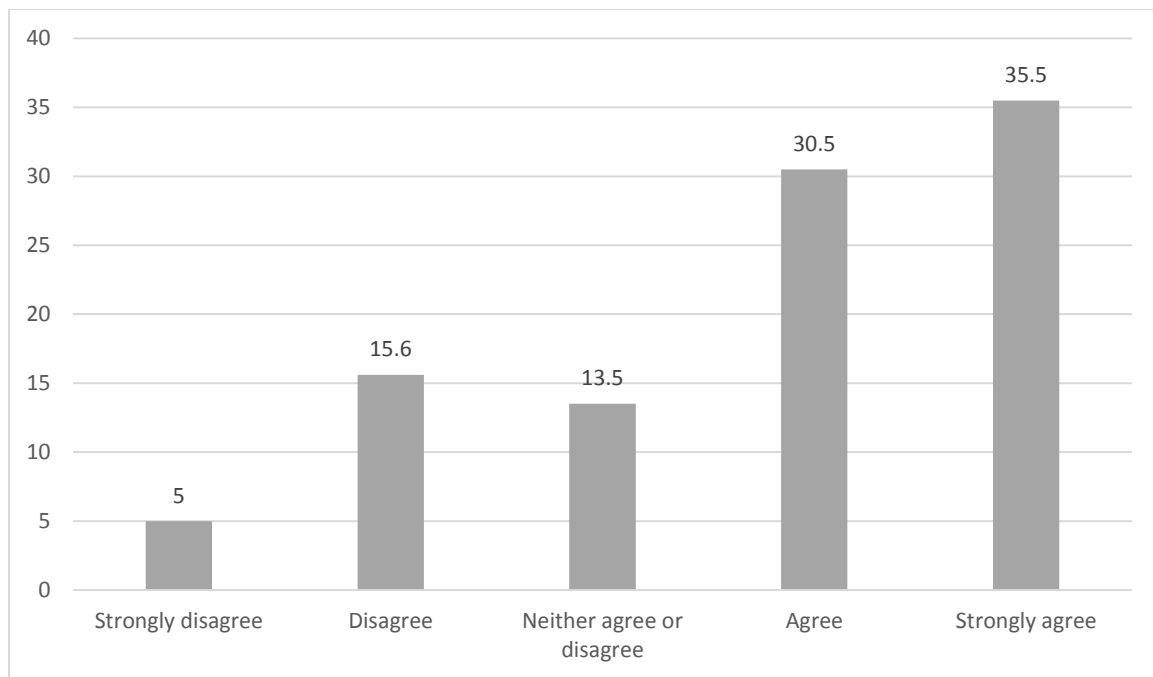


Figure 19: I believe that the use of electronic banking services facilitates transactions with the bank I cooperate with

- I consider that the use of electronic banking services greatly reduces the time of transactions with the bank

Table 20 and figure 20 show the percentages of the respondents' answers regarding the statement "I consider that the use of electronic banking services greatly reduces the time of transactions with the bank". Specifically, 58.2% state their agreement with the statement.

Table 20: I consider that the use of electronic banking services greatly reduces the time of transactions with the bank

	N	%	Valid %	Cumulative %
1 (SD)	18	12.8	12.8	12.8
2 (D)	7	5.0	5.0	17.7
3 (NA, ND)	34	24.1	24.1	41.8
4 (A)	32	22.7	22.7	64.5
5 (SA)	50	35.5	35.5	100.0
Sum	141	100.0	100.0	

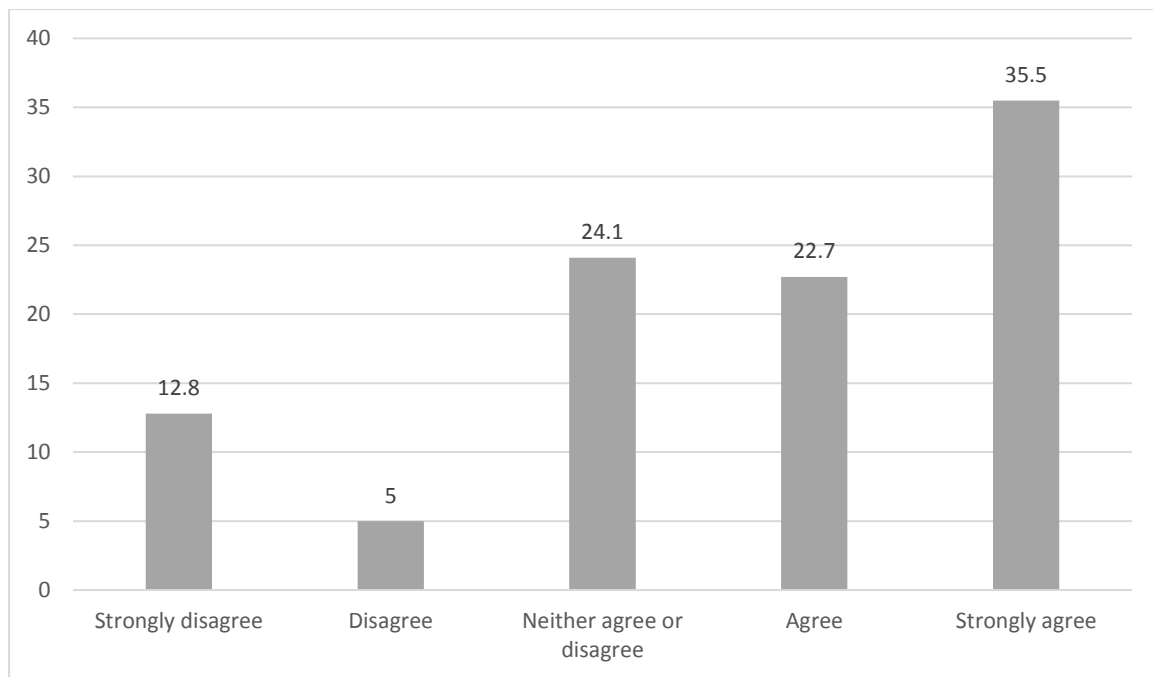


Figure 20: I consider that the use of electronic banking services greatly reduces the time of transactions with the bank

- I believe that the use of electronic banking makes my transactions with the bank more convenient.

Table 21 and figure 21 show the percentages of the respondents' answers regarding the statement "I believe that the use of electronic banking makes my transactions with the bank more convenient". Specifically, 86.5% state their agreement with the statement.

Table 21: I believe that the use of electronic banking makes my transactions with the bank more convenient

	N	%	Valid %	Cumulative %
1 (SD)	2	1.4	1.4	1.4
2 (D)	17	12.1	12.1	13.5
3 (NA, ND)	54	38.3	38.3	51.8
4 (A)	68	48.2	48.2	100.0
5 (SA)	141	100.0	100.0	

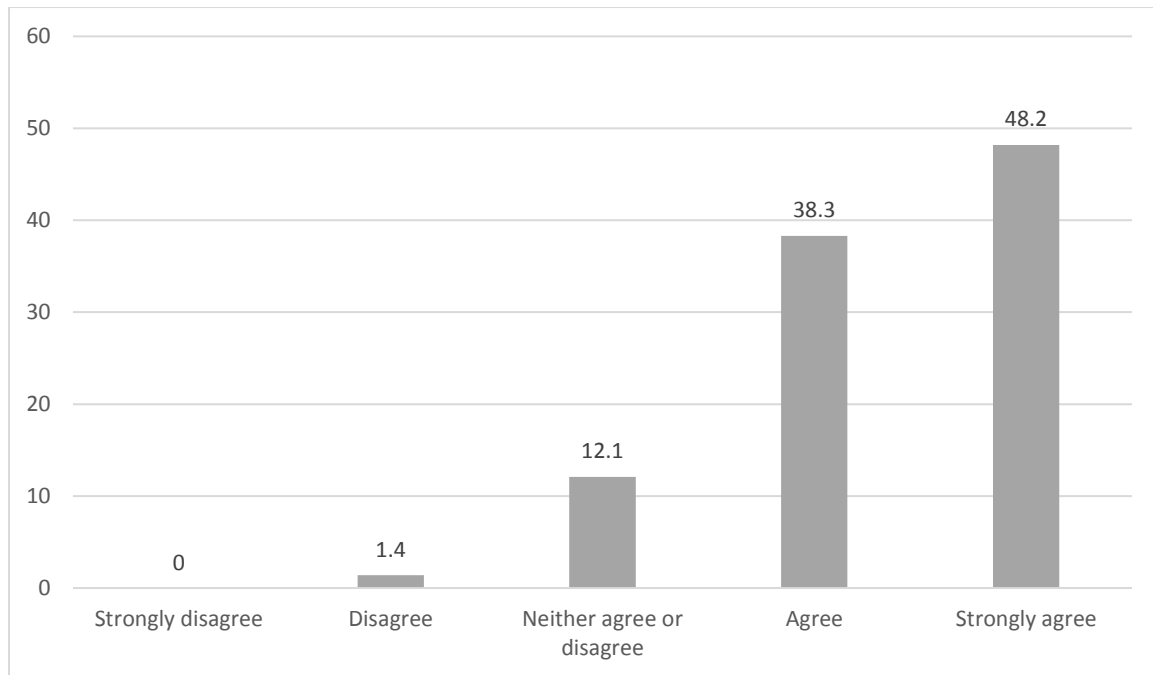


Figure 21: I believe that the use of electronic banking makes my transactions with the bank more convenient

- I believe that the use of electronic banking has made my collaboration with the bank more efficient

Table 22 and figure 22 show the percentages of the respondents' answers regarding the statement "I believe that the use of electronic banking has made my collaboration with the bank more efficient". Specifically, 52.5% state their agreement with the statement.

Table 22: I believe that the use of electronic banking has made my collaboration with the bank more efficient

	N	%	Valid %	Cumulative %
1 (SD)	5	3.5	3.5	3.5
2 (D)	27	19.1	19.1	22.7
3 (NA, ND)	35	24.8	24.8	47.5
4 (A)	20	14.2	14.2	61.7
5 (SA)	54	38.3	38.3	100.0
Sum	141	100.0	100.0	

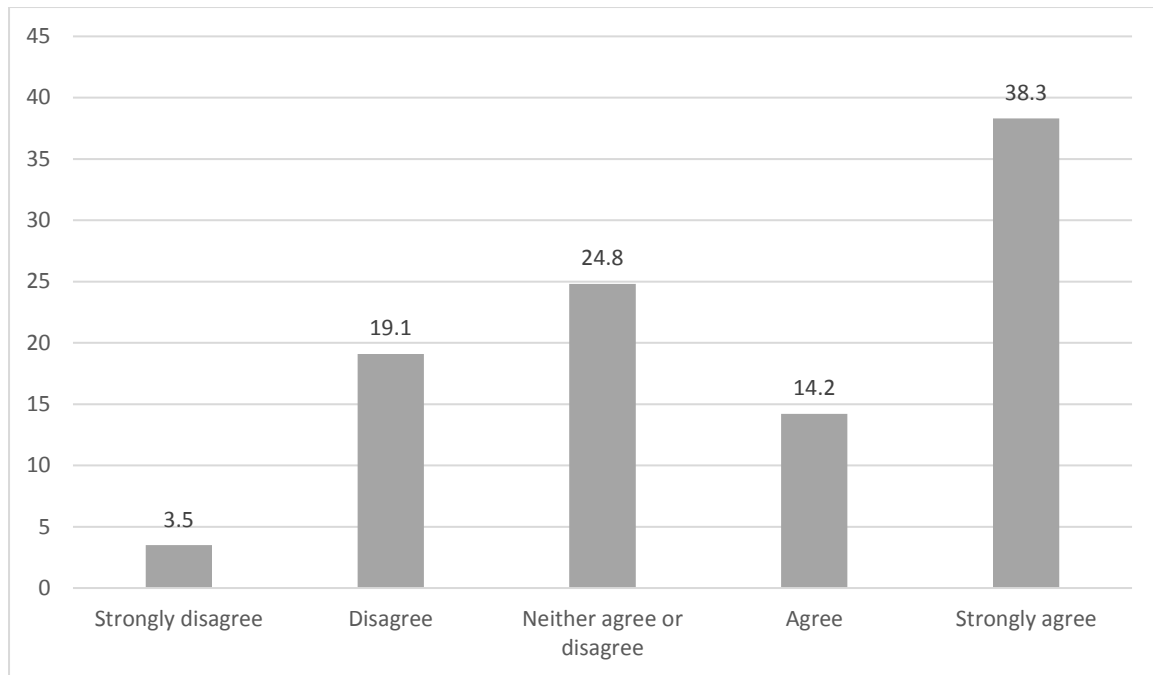


Figure 22: I believe that the use of electronic banking has made my collaboration with the bank more efficient

Section 6: Perceived Risk

Table 23 and figure 23 show the mean score of the respondents' answers regarding perceived risk. Specifically, consumers indicate that they believe that mistakes and issues from the use of e-banking services are difficult to be resolved ($M = 2.70$, $SD = .866$) as well as that e-banking services are responsible for the insecurity they feel when they use them ($M = 2.49$, $SD = 1.07$). Overall, perceived risk presents a mean of 2.30 ($SD = .406$) and it can be characterized as low.

Table 23: Means of Perceived risk

	Mean	SD
The use of electronic banking services has presented problems and malfunctions such as the slow speed of completion of transactions	1.9291	.70352
The use of electronic banking has led to erroneous transactions and performance problems	2.1560	1.00913
The use of electronic banking has led to my concern for the proper conduct of a transaction.	2.4965	1.07321
I think that in the event of an error, I will lose considerable time in correcting it.	2.7092	.86635

When using electronic banking services, I feel insecure to provide personal information.	2.2979	.96173
When using electronic banking services, I am afraid that third parties may gain access to my account	2.2270	1.06482
Total perceived risk	2.3026	.40659

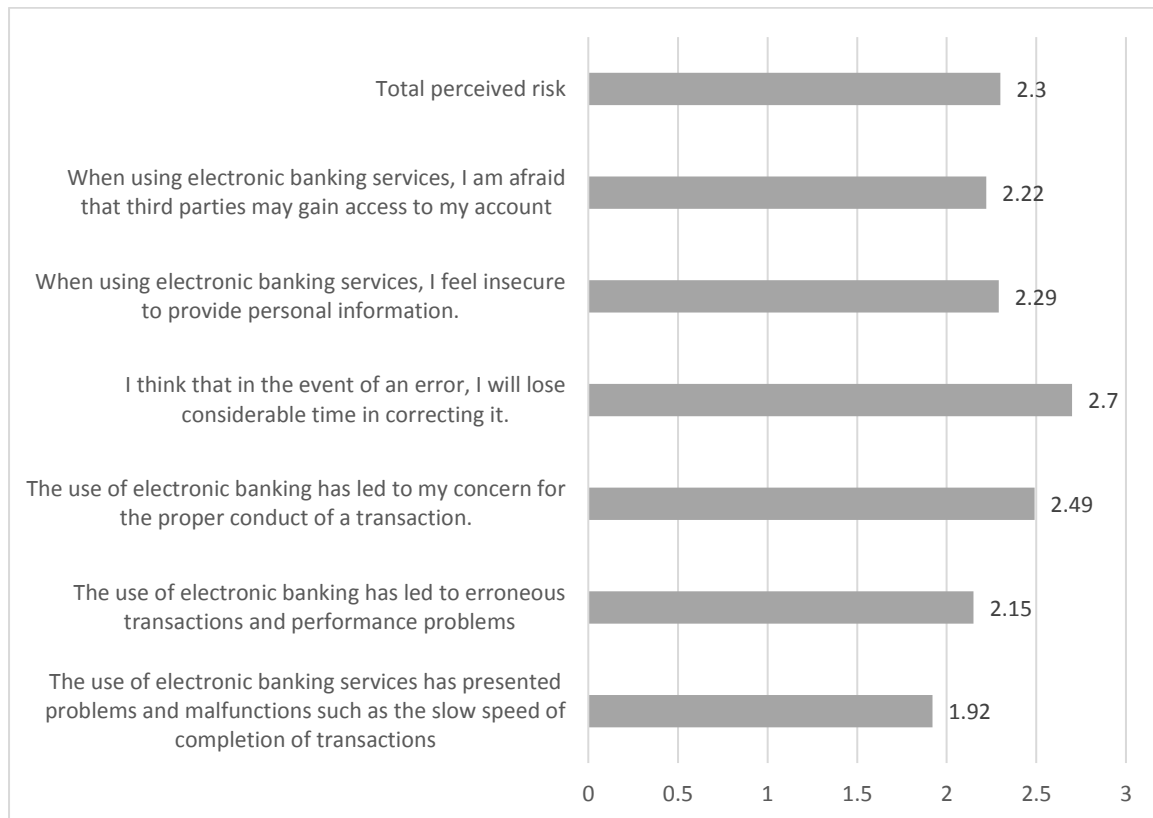


Figure 23

- The use of electronic banking services has presented problems and malfunctions such as the slow speed of completion of transactions

Table 24 and figure 24 show the percentages of the respondents' answers regarding the statement "The use of electronic banking services has presented problems and malfunctions such as the slow speed of completion of transactions". Specifically, 85.8% state their disagreement with the statement.

Table 24: The use of electronic banking services has presented problems and malfunctions such as the slow speed of completion of transactions

	N	%	Valid %	Cumulative %
1 (SD)	35	24.8	24.8	24.8
2 (D)	86	61.0	61.0	85.8
3 (NA, ND)	15	10.6	10.6	96.5

4 (A)	5	3.5	3.5	100.0
Sum	141	100.0	100.0	

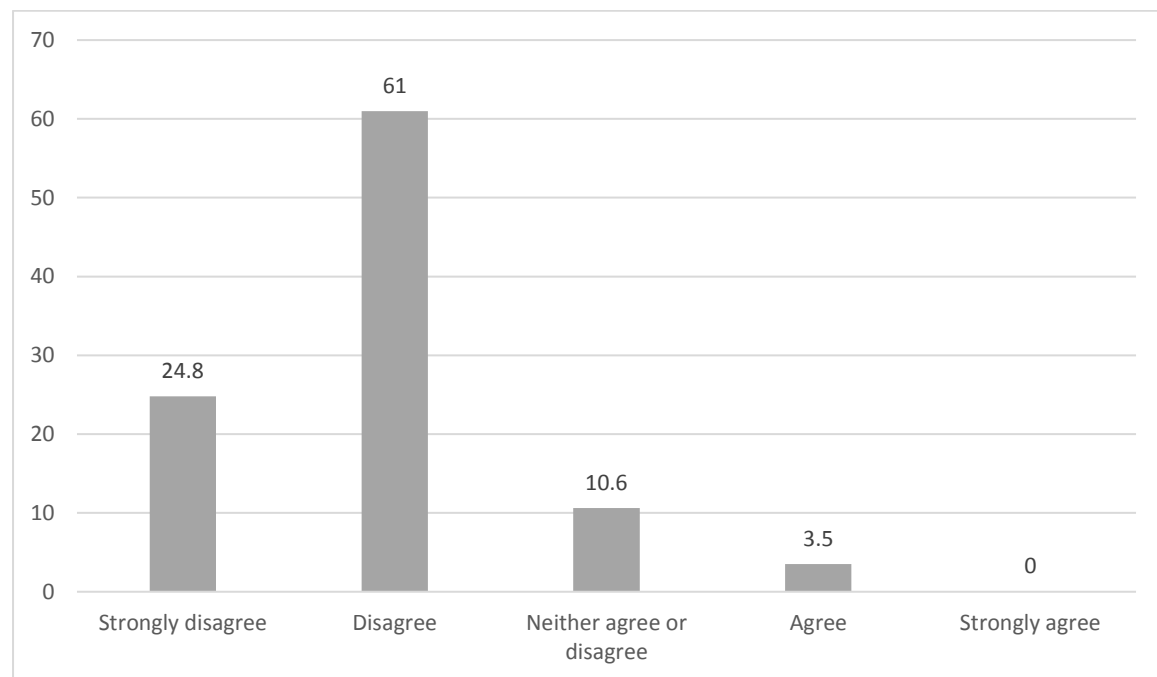


Figure 24: The use of electronic banking services has presented problems and malfunctions such as the slow speed of completion of transactions

- The use of electronic banking has led to erroneous transactions and performance problems

Table 25 and figure 25 show the percentages of the respondents' answers regarding the statement "The use of electronic banking has led to erroneous transactions and performance problems". Specifically, 70.3% state their disagreement with the statement.

Table 25: The use of electronic banking has led to erroneous transactions and performance problems

	N	%	Valid %	Cumulative %
1 (SD)	38	27.0	27.0	27.0
2 (D)	61	43.3	43.3	70.2
3 (NA, ND)	30	21.3	21.3	91.5
4 (A)	6	4.3	4.3	95.7
5 (SA)	6	4.3	4.3	100.0
Sum	141	100.0	100.0	

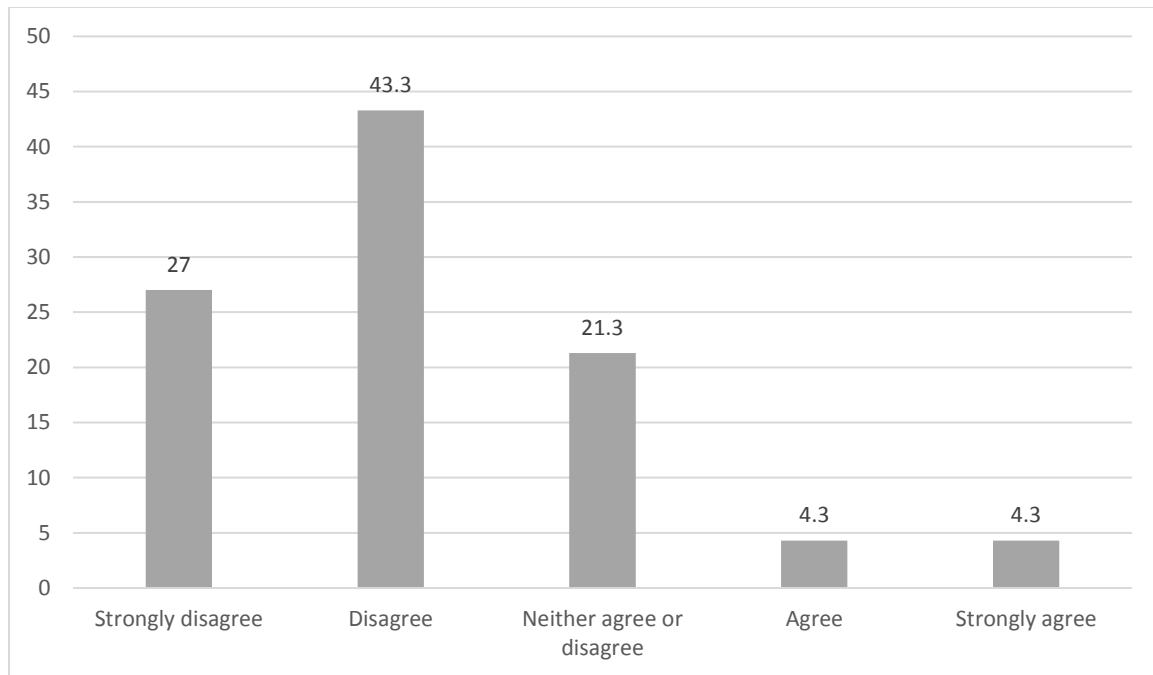


Figure 25: The use of electronic banking has led to erroneous transactions and performance problems

- The use of electronic banking has led to my concern for the proper conduct of a transaction

Table 26 and figure 26 show the percentages of the respondents' answers regarding the statement "The use of electronic banking has led to my concern for the proper conduct of a transaction". Specifically, 56% state their disagreement with the statement.

Table 26: The use of electronic banking has led to my concern for the proper conduct of a transaction

	N	%	Valid %	Cumulative %
1 (SD)	27	19.1	19.1	19.1
2 (D)	52	36.9	36.9	56.0
3 (NA, ND)	28	19.9	19.9	75.9
4 (A)	33	23.4	23.4	99.3
5 (SA)	1	.7	.7	100.0
Sum	141	100.0	100.0	

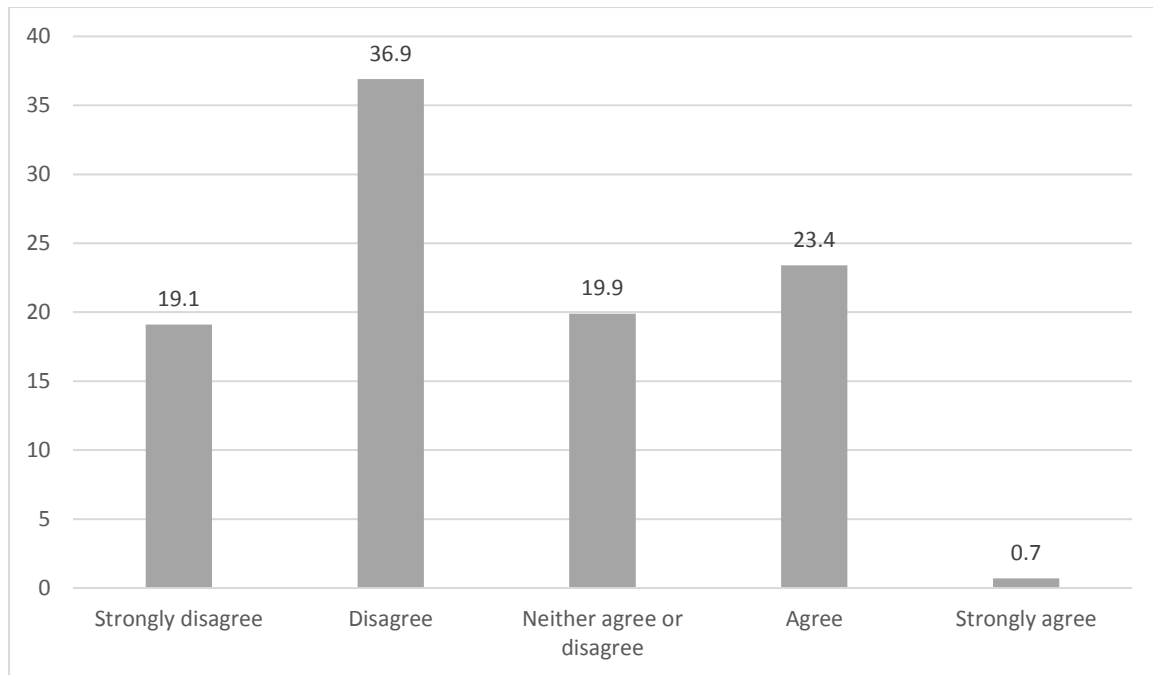


Figure 26: The use of electronic banking has led to my concern for the proper conduct of a transaction

- I think that in the event of an error, I will lose considerable time in correcting it

Table 27 and figure 27 show the percentages of the respondents' answers regarding the statement "I think that in the event of an error, I will lose considerable time in correcting it". Specifically, 39% state their disagreement with the statement.

Table 27: I think that in the event of an error, I will lose considerable time in correcting it

	N	%	Valid %	Cumulative %
1 (SD)	9	6.4	6.4	6.4
2 (D)	46	32.6	32.6	39.0
3 (NA, ND)	69	48.9	48.9	87.9
4 (A)	11	7.8	7.8	95.7
5 (SA)	6	4.3	4.3	100.0
Sum	141	100.0	100.0	

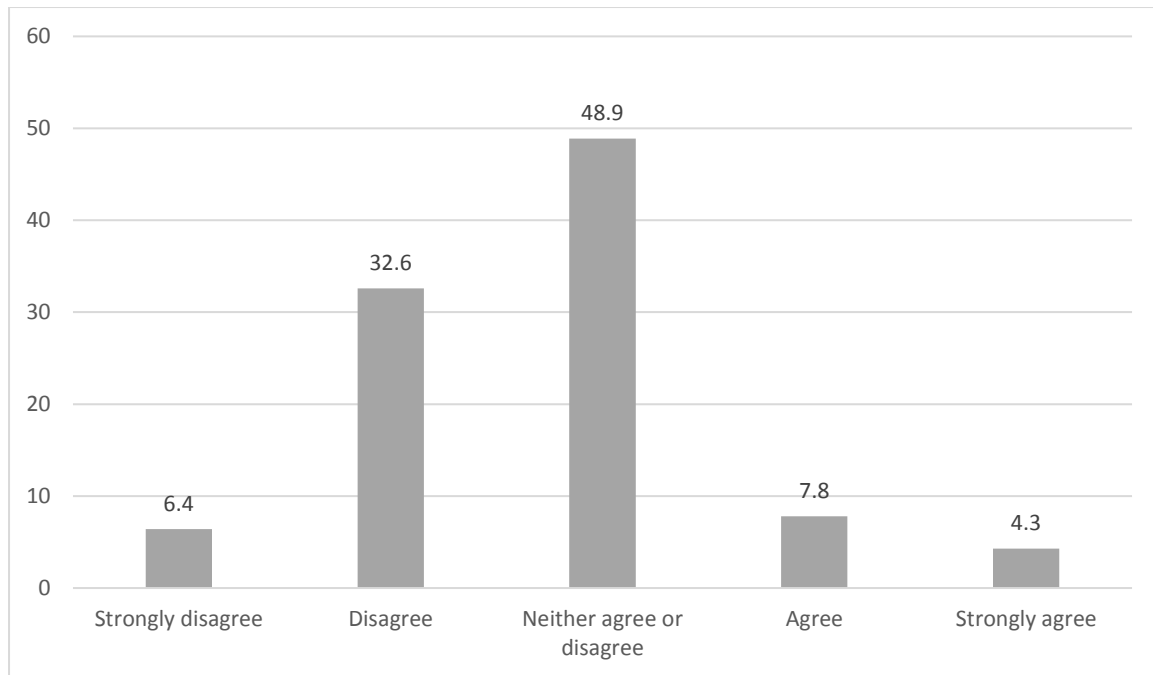


Figure 27: I think that in the event of an error, I will lose considerable time in correcting it

- When using electronic banking services, I feel insecure to provide personal information

Table 28 and figure 28 show the percentages of the respondents' answers regarding the statement "When using electronic banking services, I feel insecure to provide personal information". Specifically, 56% state their disagreement with the statement.

Table 28: When using electronic banking services, I feel insecure to provide personal information

	N	%	Valid %	Cumulative %
1 (SD)	34	24.1	24.1	24.1
2 (D)	45	31.9	31.9	56.0
3 (NA, ND)	50	35.5	35.5	91.5
4 (A)	10	7.1	7.1	98.6
5 (SA)	2	1.4	1.4	100.0
Sum	141	100.0	100.0	

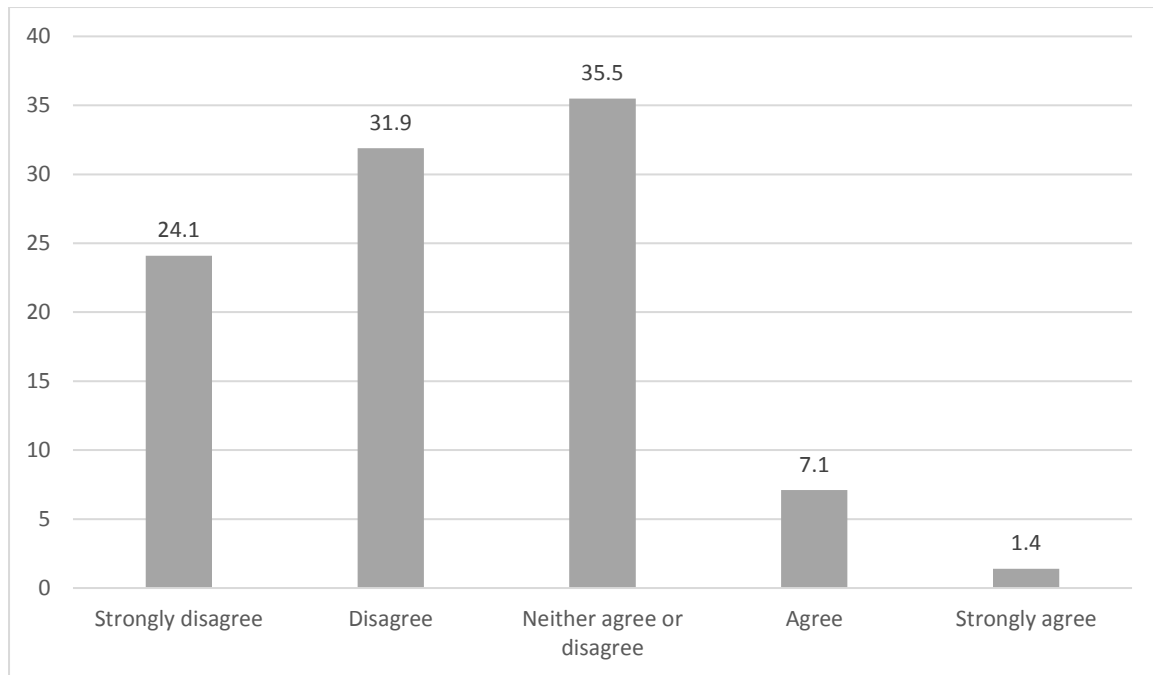


Figure 28: When using electronic banking services, I feel insecure to provide personal information

- When using electronic banking services, I am afraid that third parties may gain access to my account

Table 29 and figure 29 show the percentages of the respondents' answers regarding the statement "When using electronic banking services, I am afraid that third parties may gain access to my account". Specifically, 56.7% state their disagreement with the statement.

Table 29: When using electronic banking services, I am afraid that third parties may gain access to my account

	N	%	Valid %	Cumulative %
1 (SD)	46	32.6	32.6	32.6
2 (D)	34	24.1	24.1	56.7
3 (NA, ND)	48	34.0	34.0	90.8
4 (A)	9	6.4	6.4	97.2
5 (SA)	4	2.8	2.8	100.0
Sum	141	100.0	100.0	

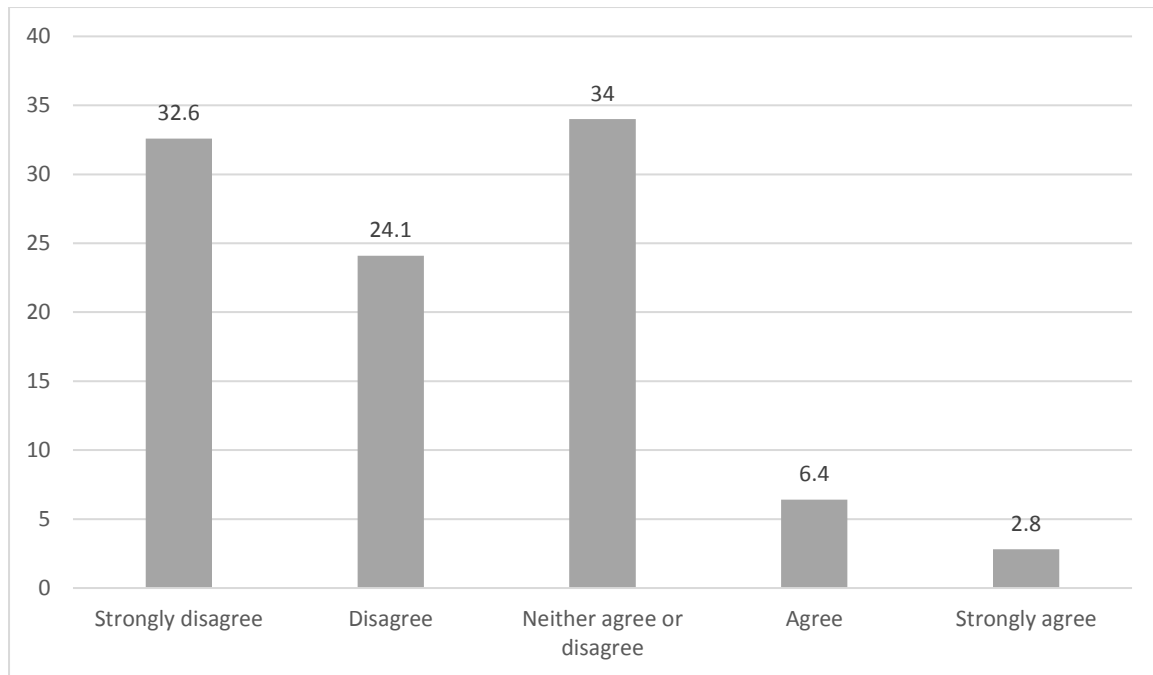


Figure 29: When using electronic banking services, I am afraid that third parties may gain access to my account

Section 7: Compatibility

Table 30 and figure 30 show the mean score of the respondents' answers regarding compatibility of e-banking with the lives of the consumers. Specifically, consumers indicate that at higher level they think that e-banking is compatible with their lifestyle ($M = 4.01$, $SD = .819$). Overall, compatibility presents a mean of 3.95 ($SD = .993$) and it can be characterized as over the average.

Table 30: Means of Compatibility

	Mean	SD
I believe that the use of electronic banking services is in line with how I have chosen to live	4.0142	.81928
I believe that the use of electronic banking services is in line with how I prefer to deal with the bank	3.8865	.94938
Total compatibility	3.9504	.71290

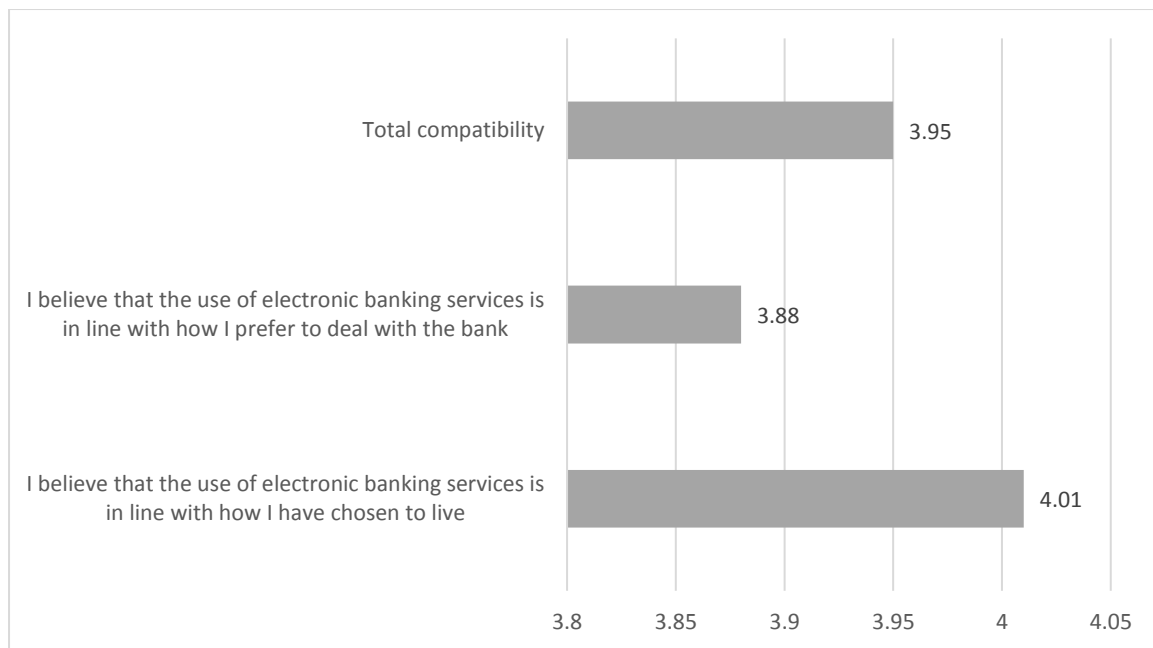


Figure 30

- I believe that the use of electronic banking services is in line with how I have chosen to live

Table 31 and figure 31 show the percentages of the respondents' answers regarding the statement "I believe that the use of electronic banking services is in line with how I have chosen to live". Specifically, 73% state their agreement with the statement.

Table 31: I believe that the use of electronic banking services is in line with how I have chosen to live

	N	%	Valid %	Cumulative %
2 (D)	4	2.8	2.8	2.8
3 (NA, ND)	34	24.1	24.1	27.0
4 (A)	59	41.8	41.8	68.8
5 (SA)	44	31.2	31.2	100.0
Sum	141	100.0	100.0	

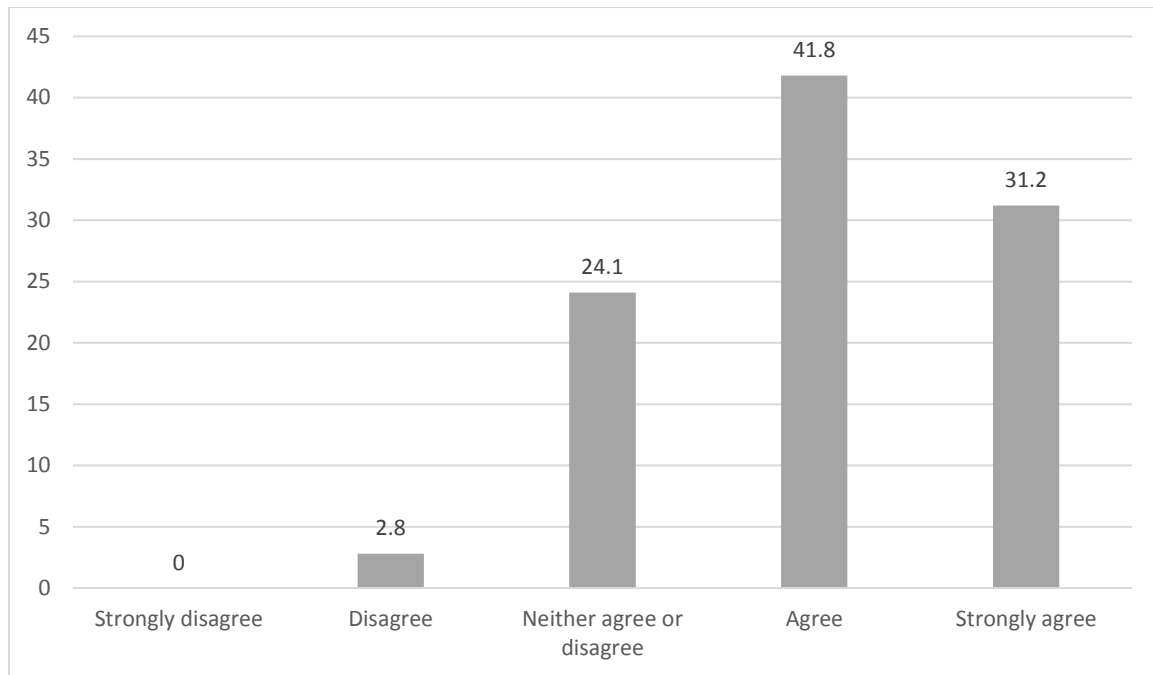


Figure 31: I believe that the use of electronic banking services is in line with how I have chosen to live

- I believe that the use of electronic banking services is in line with how I prefer to deal with the bank

Table 32 and figure 32 show the percentages of the respondents' answers regarding the statement "I believe that the use of electronic banking services is in line with how I prefer to deal with the bank". Specifically, 60.2% state their agreement with the statement.

Table 32: I believe that the use of electronic banking services is in line with how I prefer to deal with the bank

	N	%	Valid %	Cumulative %
2 (D)	8	5.7	5.7	5.7
3 (NA, ND)	48	34.0	34.0	39.7
4 (A)	37	26.2	26.2	66.0
5 (SA)	48	34.0	34.0	100.0
Sum	141	100.0	100.0	

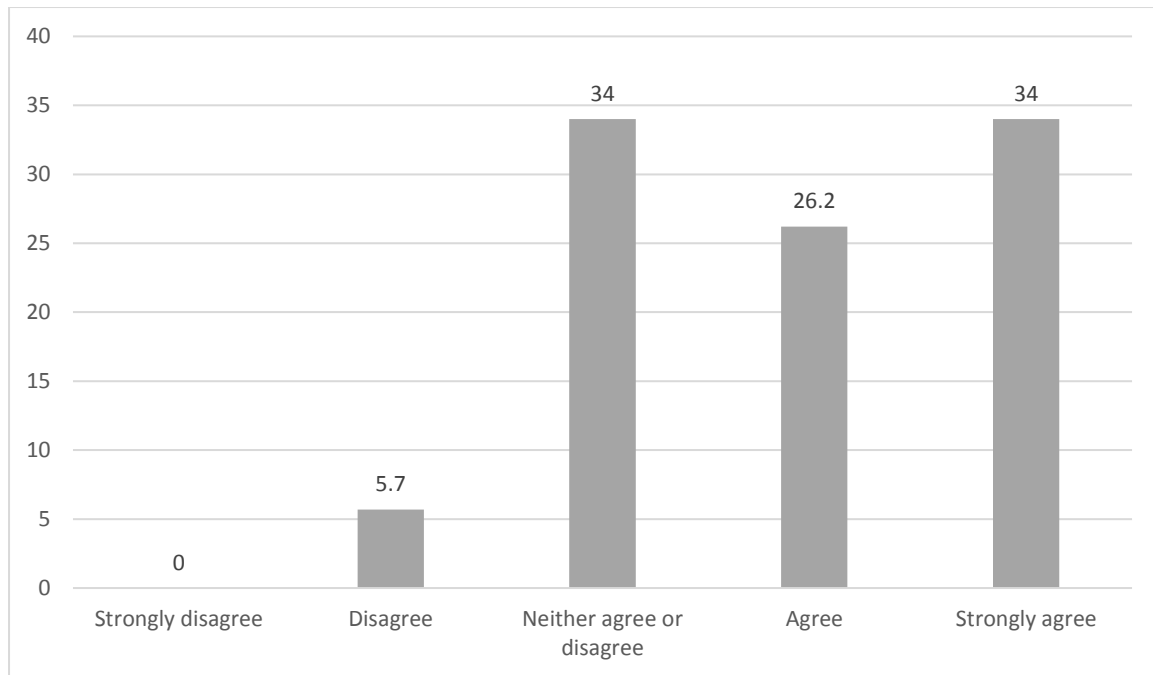


Figure 33: I believe that the use of electronic banking services is in line with how I prefer to deal with the bank

Section 8: Self-efficacy

Table 34 and figure 34 show the mean score of the respondents' answers regarding self-efficacy. Specifically, consumers indicate that at higher level that they are confident of using e-banking even if they have never used it before ($M = 3.14$, $SD = 1.30$) as well as that they are confident of using e-banking if they have seen someone else using it before trying it themselves ($M = 3.17$, $SD = 1.23$). Overall, self-efficacy presents a mean of 2.67 ($SD = .588$) and it can be characterized as low.

Table 34: Means of Self-efficacy

	Mean	SD
I am confident in using electronic banking services without having to give someone directions	2.0142	1.09535
I am confident in using electronic banking services without having used them in the past.	3.1418	1.30702
I am confident in using electronic banking services without instructions for use	2.3546	1.12208
Having seen someone else make use of my electronic banking services creates confidence	3.1702	1.23611

Total self - efficacy	2.6702	.58882
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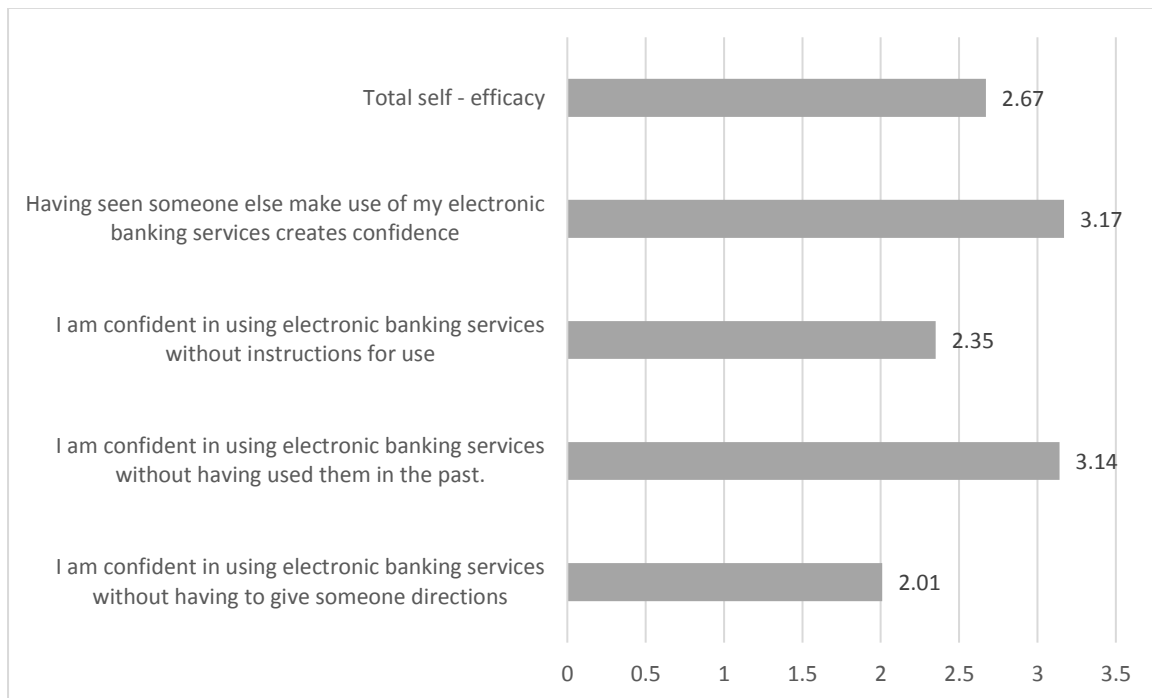


Figure 34

- I am confident in using electronic banking services without having to give someone directions.

Table 35 and figure 35 show the percentages of the respondents' answers regarding the statement "I am confident in using electronic banking services without having to give someone directions". Specifically, 75.2% state their disagreement with the statement.

Table 35: I am confident in using electronic banking services without having to give someone directions.

	N	%	Valid %	Cumulative %
1 (SD)	55	39.0	39.0	39.0
2 (D)	51	36.2	36.2	75.2
3 (NA, ND)	19	13.5	13.5	88.7
4 (A)	10	7.1	7.1	95.7
5 (SA)	6	4.3	4.3	100.0
Sum	141	100.0	100.0	

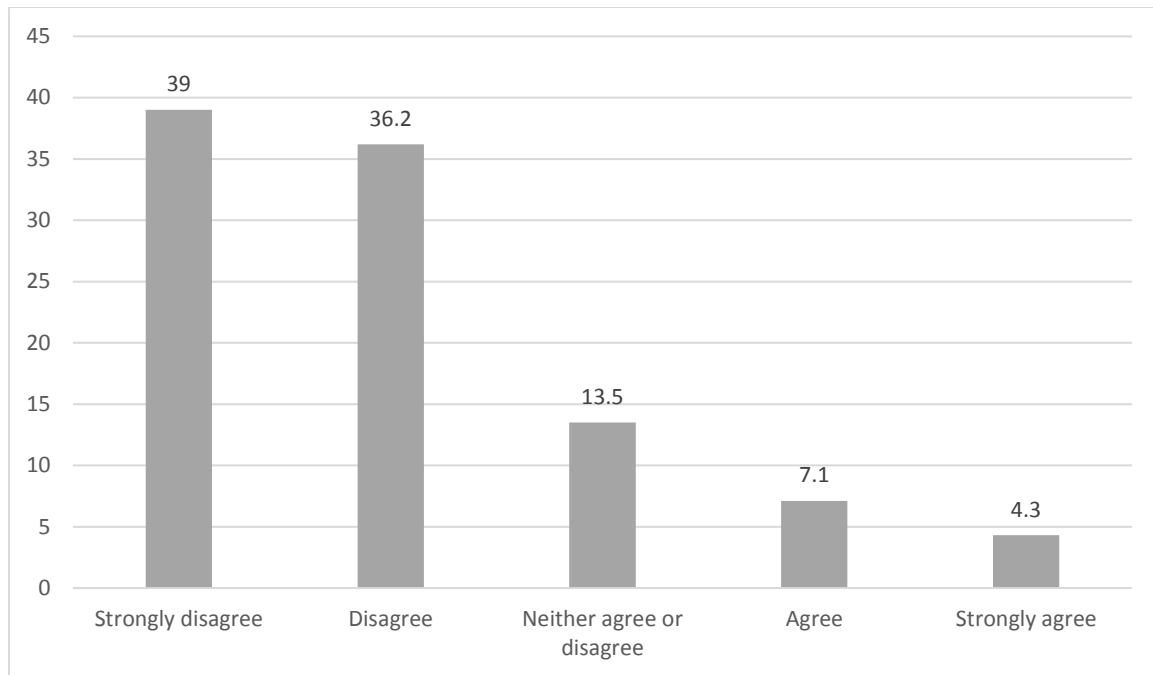


Figure 35: I am confident in using electronic banking services without having to give someone directions.

- I am confident in using electronic banking services without having used them in the past.

Table 36 and figure 36 show the percentages of the respondents' answers regarding the statement "I am confident in using electronic banking services without having used them in the past". Specifically, 44.7% state their agreement with the statement.

Table 36: I am confident in using electronic banking services without having used them in the past.

	N	%	Valid %	Cumulative %
1 (SD)	20	14.2	14.2	14.2
2 (D)	27	19.1	19.1	33.3
3 (NA, ND)	31	22.0	22.0	55.3
4 (A)	39	27.7	27.7	83.0
5 (SA)	24	17.0	17.0	100.0
Sum	141	100.0	100.0	

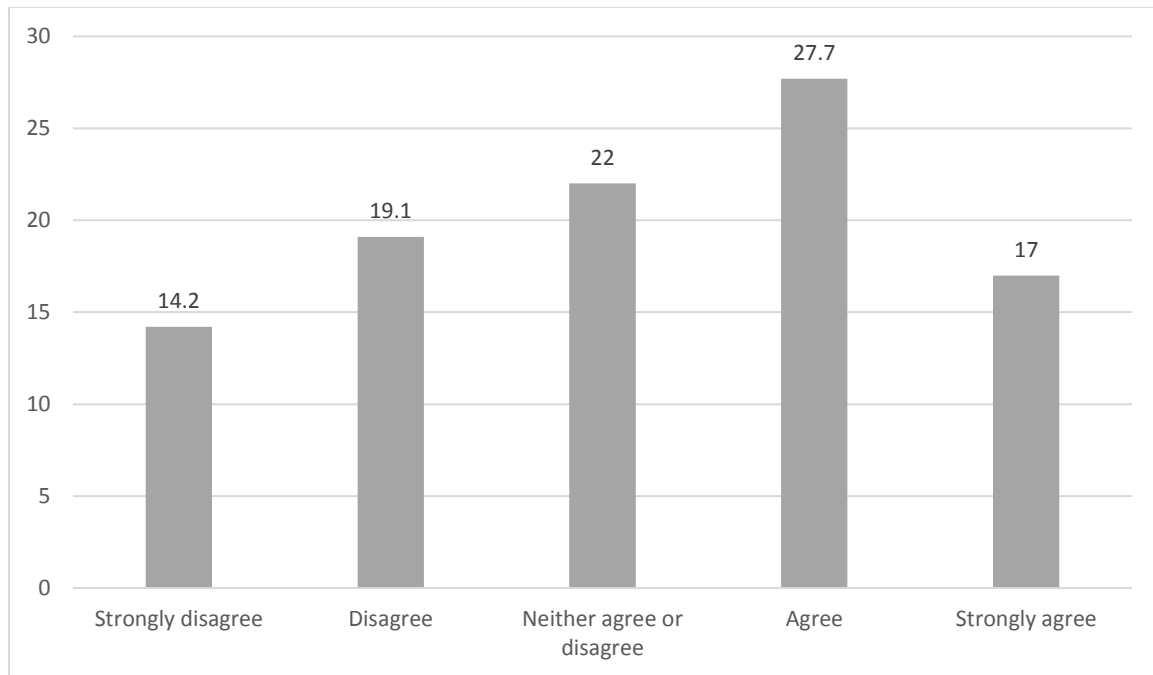


Figure 36: I am confident in using electronic banking services without having used them in the past.

➤ I am confident in using electronic banking services without instructions for use

Table 37 and figure 37 show the percentages of the respondents' answers regarding the statement "I am confident in using electronic banking services without instructions for use". Specifically, 59.5% state their disagreement with the statement.

Table 37 I am confident in using electronic banking services without instructions for use

	N	%	Valid %	Cumulative %
1 (SD)	37	26.2	26.2	26.2
2 (D)	47	33.3	33.3	59.6
3 (NA, ND)	32	22.7	22.7	82.3
4 (A)	20	14.2	14.2	96.5
5 (SA)	5	3.5	3.5	100.0
Sum	141	100.0	100.0	

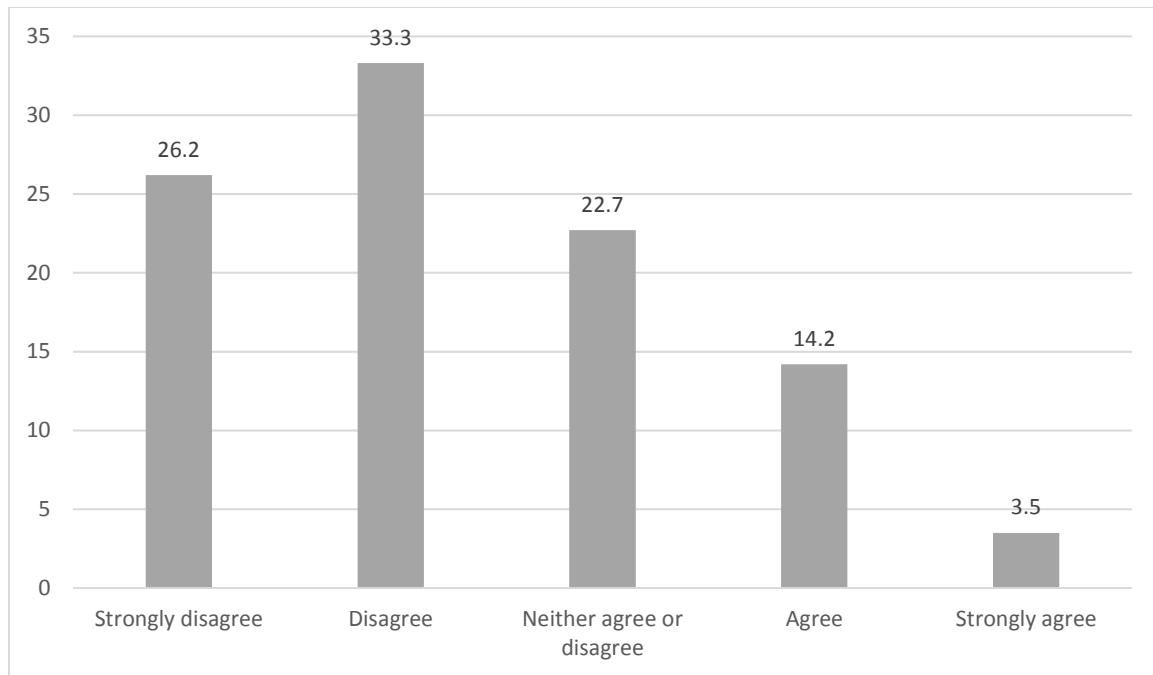


Figure 37 I am confident in using electronic banking services without instructions for use

- Having seen someone else make use of my electronic banking services creates confidence

Table 38 and figure 38 show the percentages of the respondents' answers regarding the statement "Having seen someone else make use of my electronic banking services creates confidence". Specifically, 43.3% state their agreement with the statement.

Table 38: Having seen someone else make use of my electronic banking services creates confidence

	N	%	Valid %	Cumulative %
1 (SD)	16	11.3	11.3	11.3
2 (D)	27	19.1	19.1	30.5
3 (NA, ND)	37	26.2	26.2	56.7
4 (A)	39	27.7	27.7	84.4
5 (SA)	22	15.6	15.6	100.0
Sum	141	100.0	100.0	

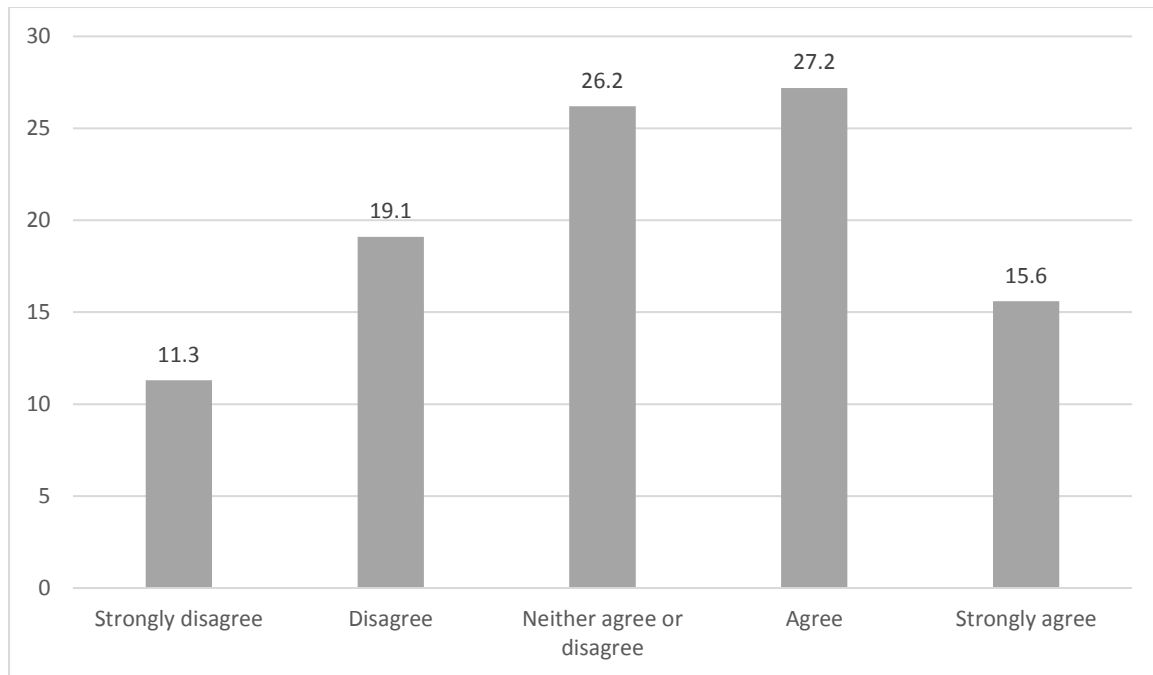


Figure 38: Having seen someone else make use of my electronic banking services creates confidence

Section 9: Financial Cost

Table 39 and figure 39 show the mean score of the respondents' answers regarding financial cost. Specifically, consumers indicate that at higher level using the e-banking allows them to save money ($M = 2.67$, $SD = 1.18$). Overall, financial cost presents a mean of 2.65 ($SD = 1.20$) and it can be characterized as low.

Table 39: Means of financial cost

	Mean	SD
Using electronic banking services saves money.	2.6738	1.18017
The use of electronic banking services minimizes costs	2.6312	1.23873
Total financial cost	2.6525	1.20111

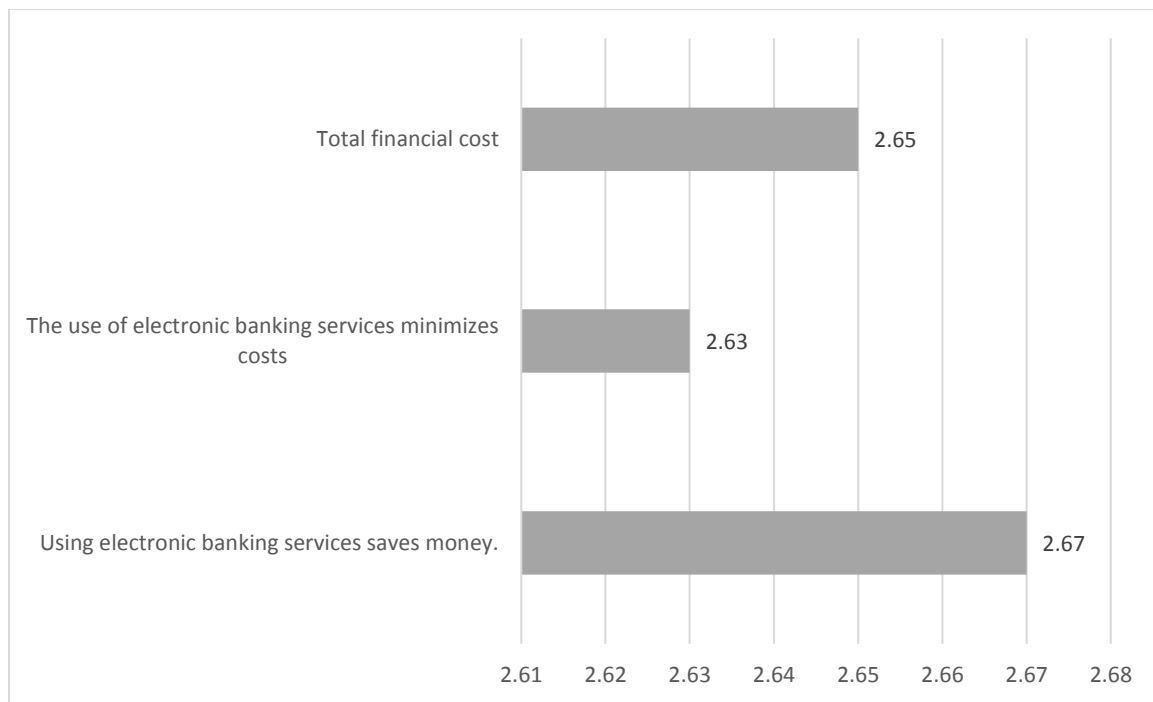


Figure 39

➤ Using electronic banking services saves money

Table 40 and figure 40 show the percentages of the respondents' answers regarding the statement "Using electronic banking services saves money". Specifically, 46.1% state their agreement with the statement.

Table 40: Using electronic banking services saves money

	N	%	Valid %	Cumulative %
2 (D)	26	18.4	18.4	18.4
3 (NA, ND)	37	26.2	26.2	44.7
4 (A)	48	34.0	34.0	78.7
5 (SA)	17	12.1	12.1	90.8
Sum	13	9.2	9.2	100.0

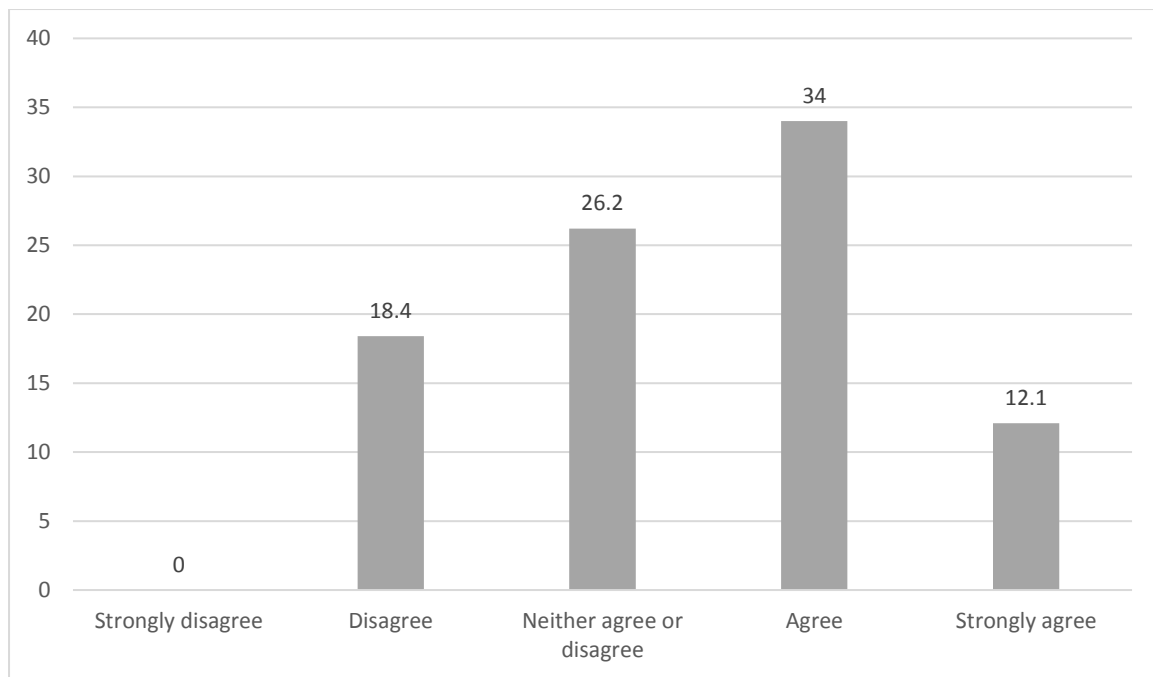


Figure 40: Using electronic banking services saves money

- The use of electronic banking services minimizes costs

Table 41 and figure 41 show the percentages of the respondents' answers regarding the statement "The use of electronic banking services minimizes costs". Specifically, 42.5% state their disagreement with the statement.

Table 41: The use of electronic banking services minimizes costs

	N	%	Valid %	Cumulative %
1 (SD)	35	24.8	24.8	24.8
2 (D)	25	17.7	17.7	42.6
3 (NA, ND)	51	36.2	36.2	78.7
4 (A)	17	12.1	12.1	90.8
5 (SA)	13	9.2	9.2	100.0
Sum	141	100.0	100.0	

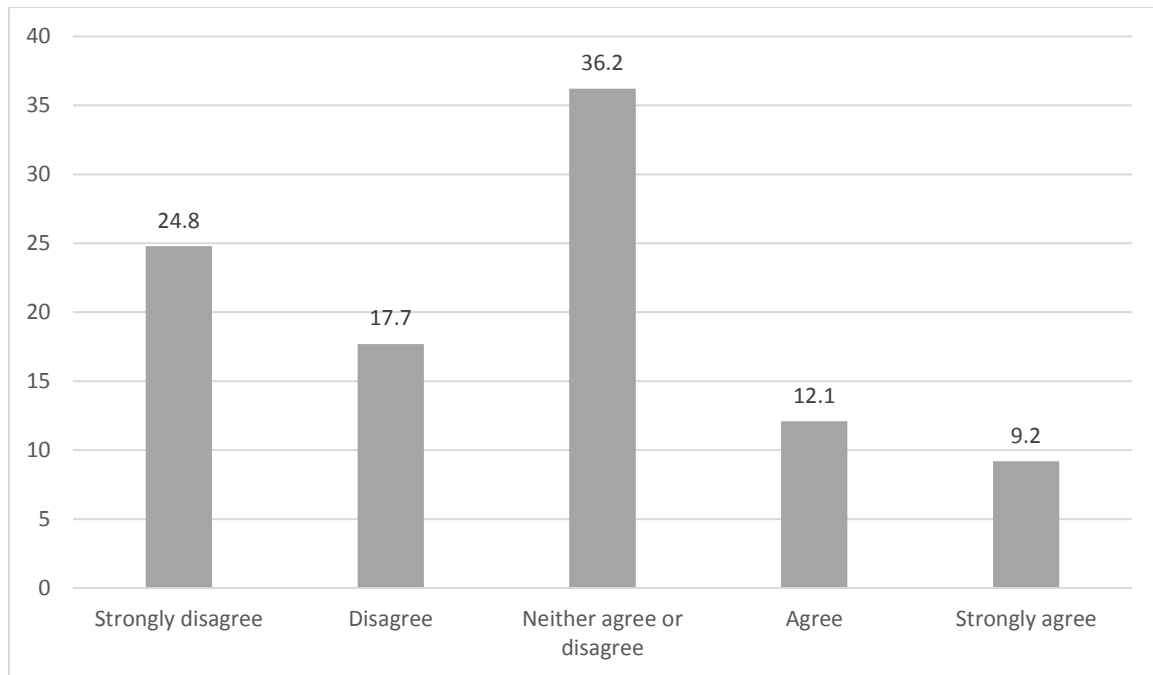


Figure 41: The use of electronic banking services minimizes costs

Section 10: Intention to use

Table 42 and figure 42 show the mean score of the respondents' answers regarding intention to use e-banking. Specifically, consumers indicate that at higher level that they believe that e-banking services will be part of their life in the future ($M = 4.22$, $SD = .613$). Overall, intention to use presents a mean of 4.09 ($SD = .557$) and it can be characterized as very high.

Table 42: Means of Intention to use

	Mean	SD
I intend to make use of electronic banking services for my transactions with the bank	4.0851	.68127
I intend to make future use of electronic banking services	4.2270	.61376
I would recommend the use of electronic banking services to others	3.9858	.73665
Total intention to use	4.0993	.55741

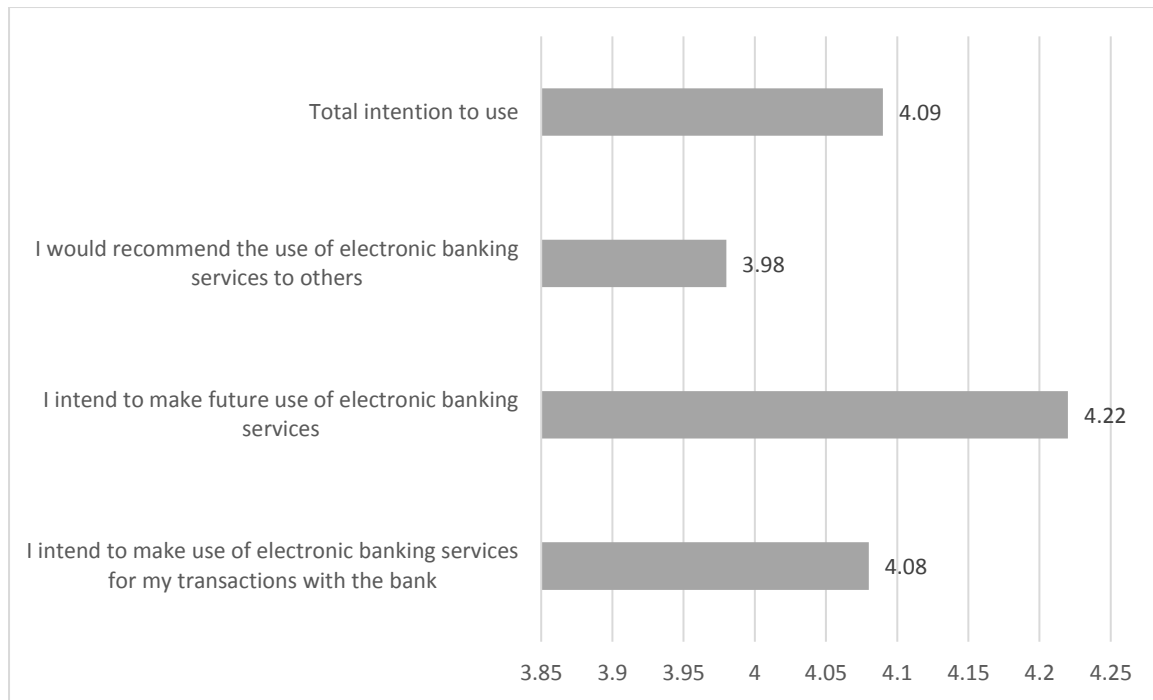


Figure 42

- I intend to make use of electronic banking services for my transactions with the bank

Table 43 and figure 43 show the percentages of the respondents' answers regarding the statement "I intend to make use of electronic banking services for my transactions with the bank". Specifically, 83.6% state their agreement with the statement.

Table 43: I intend to make use of electronic banking services for my transactions with the bank

	N	%	Valid %	Cumulative %
2 (D)	2	1.4	1.4	1.4
3 (NA, ND)	21	14.9	14.9	16.3
4 (A)	81	57.4	57.4	73.8
5 (SA)	37	26.2	26.2	100.0
Sum	141	100.0	100.0	

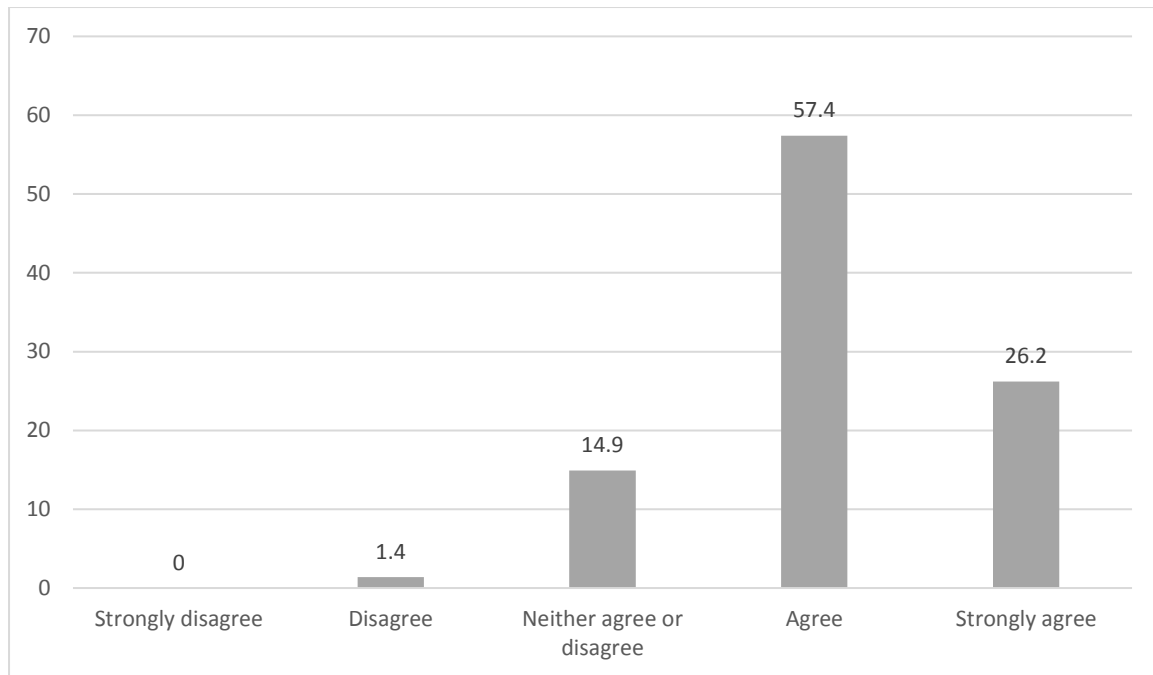


Figure 43: I intend to make use of electronic banking services for my transactions with the bank

➤ I intend to make future use of electronic banking services

Table 44 and figure 44 show the percentages of the respondents' answers regarding the statement "I intend to make future use of electronic banking services". Specifically, 91.5% state their agreement with the statement.

Table 44: I intend to make future use of electronic banking services

	N	%	Valid %	Cumulative %
2 (D)	1	.7	.7	.7
3 (NA, ND)	11	7.8	7.8	8.5
4 (A)	84	59.6	59.6	68.1
5 (SA)	45	31.9	31.9	100.0
Sum	141	100.0	100.0	

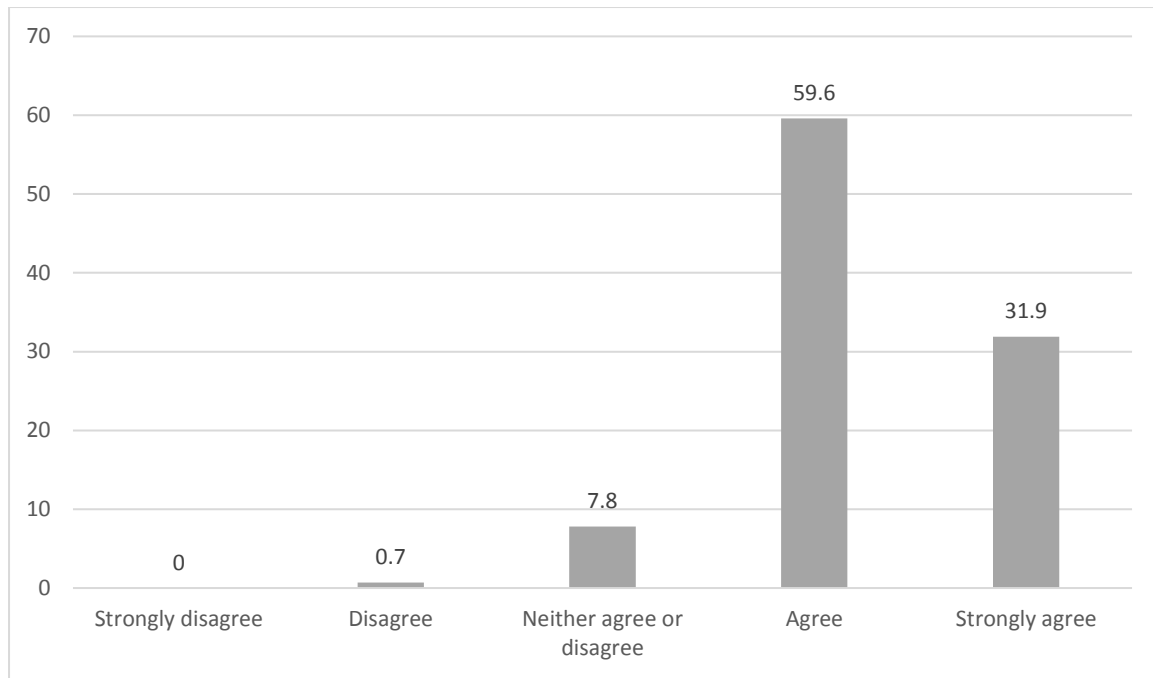


Figure 44: I intend to make future use of electronic banking services

➤ I would recommend the use of electronic banking services to others

Table 45 and figure 45 show the percentages of the respondents' answers regarding the statement "I would recommend the use of electronic banking services to others". Specifically, 82.3% state their agreement with the statement.

Table 45: I would recommend the use of electronic banking services to others

	N	%	Valid %	Cumulative %
2 (D)	7	5.0	5.0	5.0
3 (NA, ND)	18	12.8	12.8	17.7
4 (A)	86	61.0	61.0	78.7
5 (SA)	30	21.3	21.3	100.0
Sum	141	100.0	100.0	

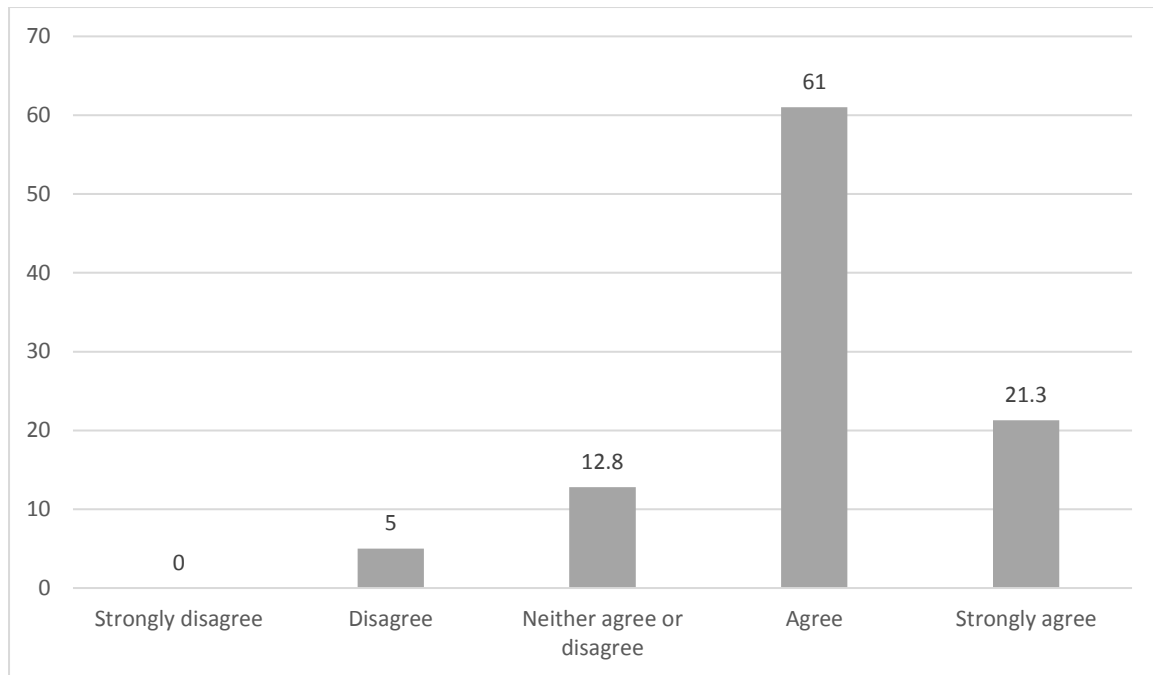


Figure 45: I would recommend the use of electronic banking services to others

Summary of factors influencing internet banking adoption

Table 46 and figure 46 show the mean score of the respondents' answers regarding all the factors that may influence internet banking adoption. Specifically, consumers illustrate higher levels of intention to use ($M = 4.09$, $SD = .557$) following by compatibility with their lives ($M = 3.95$, $SD = .712$) and perceived usefulness ($M = 3.76$, $SD = .472$).

Table 46: Summary of factors influencing internet banking adoption

	N	Minimum	Maximum	Mean	Std. Deviation
Perceived Enjoyment	141	1.00	5.00	3.3144	.99345
Perceived Ease of Use	141	1.60	4.80	3.3418	.60453
Perceived Usefulness	141	2.71	5.00	3.7649	.47261
Perceived Risk	141	1.33	3.50	2.3026	.40659
Compatibility	141	2.00	5.00	3.9504	.71290
Self-efficacy	141	1.25	4.25	2.6702	.58882
Financial cost	141	1.00	5.00	2.6525	1.20111
Intention to use	141	2.00	5.00	4.0993	.55741

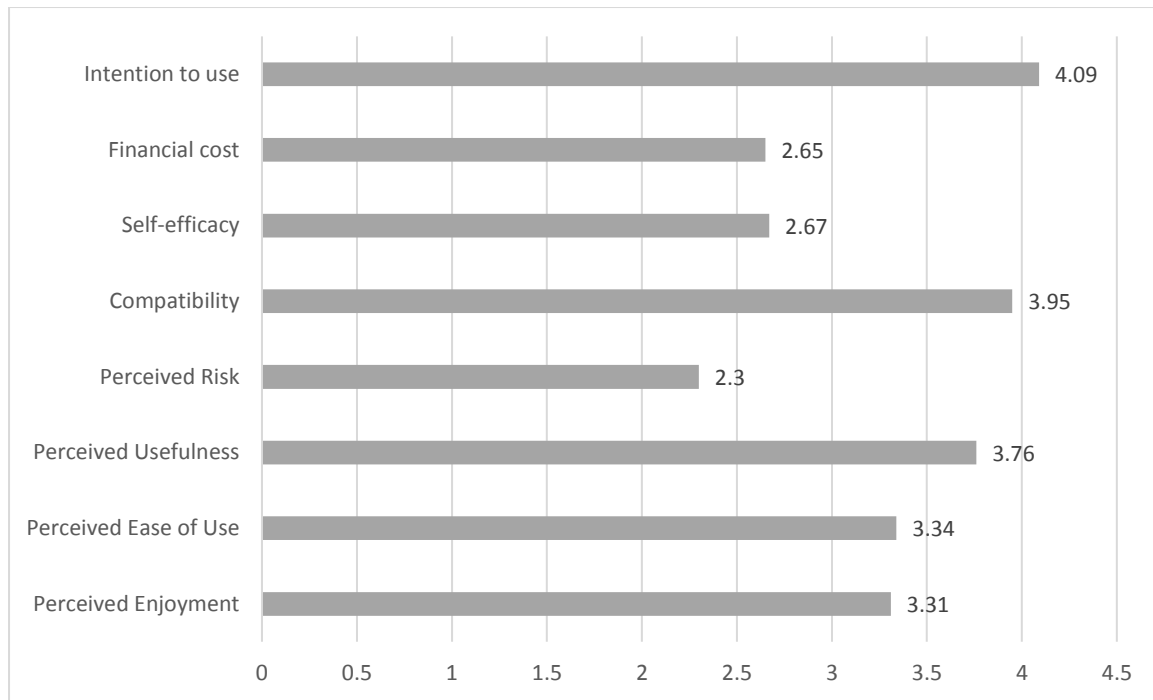


Figure 46

3.2. Inferential Statistics

This chapter presents the correlations of respondents' demographics with the factors that affect the use of electronic banking services by Greek consumers and the correlation of these factors with each other and the intention to use electronic banking services.

➤ Gender / Intention to use E-banking

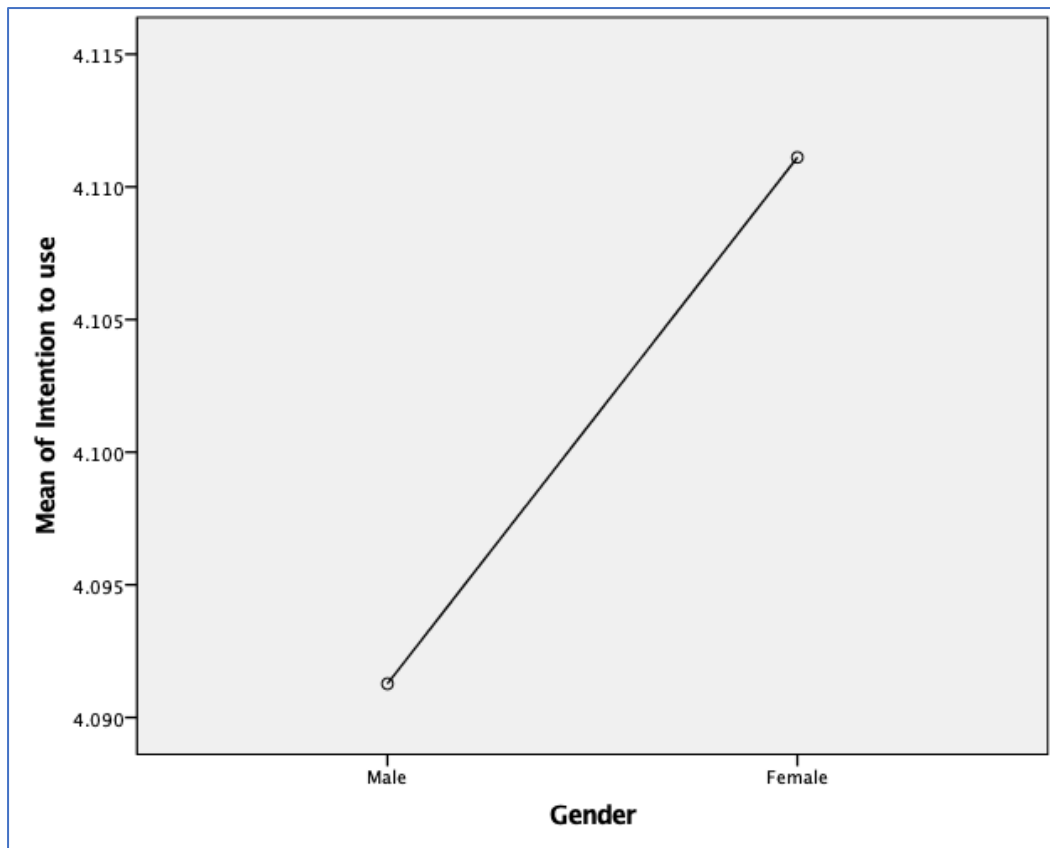
The findings from one way ANOVA suggest that intention to use e-banking is higher for female respondents (Mean= 4.11, SD = .588) and lower for male consumers (Mean= 4.09, SD = .538).

Descriptives

Intention to use e-banking

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Male	84	4.0913	.53861	.05877	3.9744	4.2082	2.00	5.00
Female	57	4.1111	.58869	.07797	3.9549	4.2673	2.67	5.00
Total	141	4.0993	.55741	.04694	4.0065	4.1921	2.00	5.00

Additionally, $p = 0.837 > 0.05$, and as a result the gender of the respondents is not a determinant factor of their intention to use e-banking ($F(1,139) = .043$, $p > 0.05$).



➤ *Age / Intention to use E-banking*

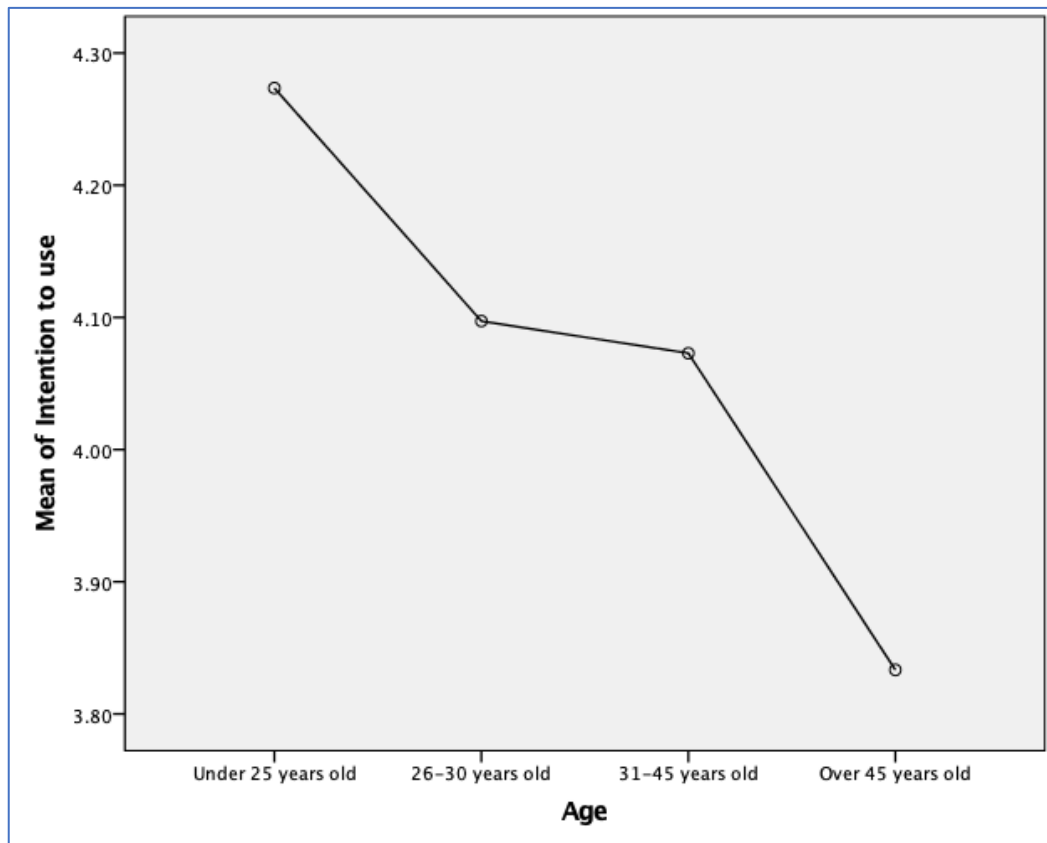
The findings from one way ANOVA suggest that the intention to use e-banking is higher for the respondents under 25 years old (Mean= 4.27, SD = .545) and lower for those over 45 years old (Mean= 3.83, SD = .664).

Descriptives

Intention to use e-banking

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Under 25 years old	39	4.2735	.54543	.08734	4.0967	4.4503	3.00	5.00
26-30 years old	48	4.0972	.49565	.07154	3.9533	4.2411	2.67	5.00
31-45 years old	32	4.0729	.52694	.09315	3.8829	4.2629	3.00	5.00
Over 45 years old	22	3.8333	.66468	.14171	3.5386	4.1280	2.00	5.00
Total	141	4.0993	.55741	.04694	4.0065	4.1921	2.00	5.00

Additionally, $p = 0.029 < 0.05$, and as a result the age of the respondents is a determinant factor of their intention to use e-banking. Specifically, the higher the age of the consumers the lower their intention to use internet banking ($F(3,137) = 3.097, p < 0.05$).



➤ *Educational level/ Intention to use E-banking*

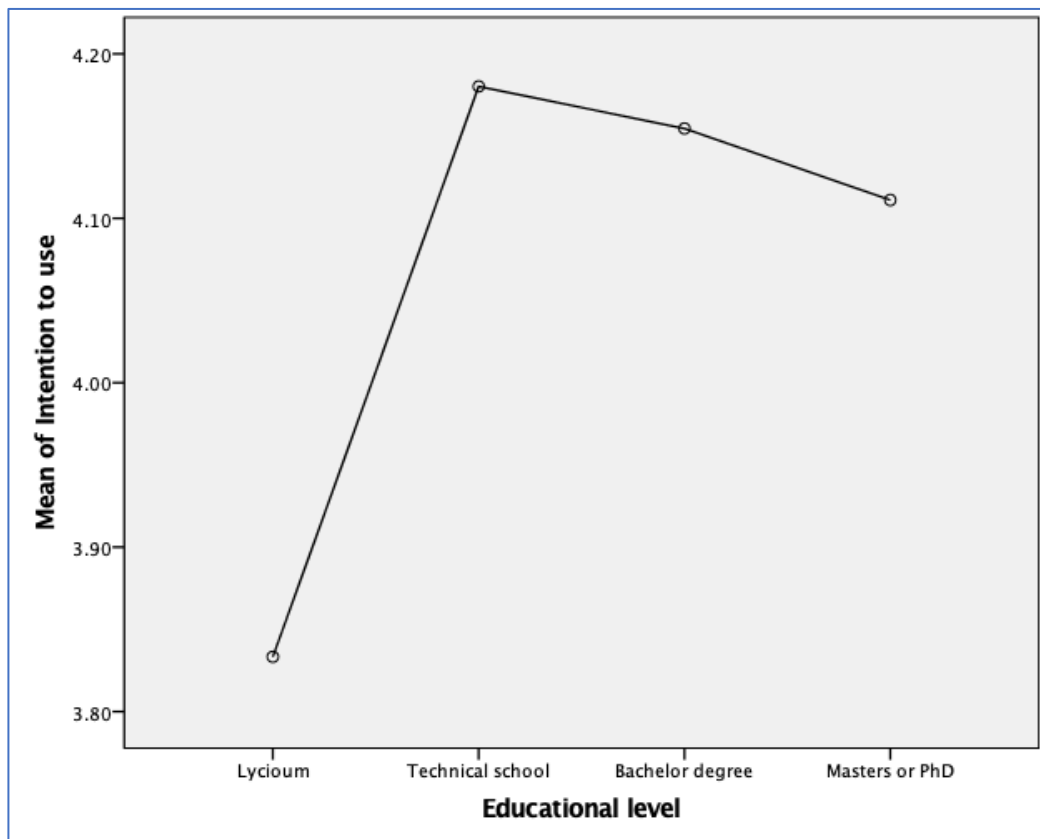
The findings from one way ANOVA suggest that the intention to use e-banking is higher for the respondents that holds a degree from a technical school (Mean= 4.18, SD = .580) and lower for those with a Lyceum diploma (Mean= 3.83, SD = .518).

Descriptives

Intention to use e-banking

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Lycium	26	3.8333	.51854	.10170	3.6239	4.0428	3.00	4.67
Technical school	37	4.1802	.58052	.09544	3.9866	4.3737	3.00	5.00
Bachelor degree	69	4.1546	.53192	.06404	4.0268	4.2824	2.00	5.00
Masters or PhD	9	4.1111	.62361	.20787	3.6318	4.5905	3.00	4.67
Total	141	4.0993	.55741	.04694	4.0065	4.1921	2.00	5.00

Additionally, $p = 0.059 > 0.05$, and as a result the educational level of the respondents is not a determinant factor of their intention to use e-banking ($F(3,137) = 2.542$, $p > 0.05$).



➤ Family income / Intention to use E-banking

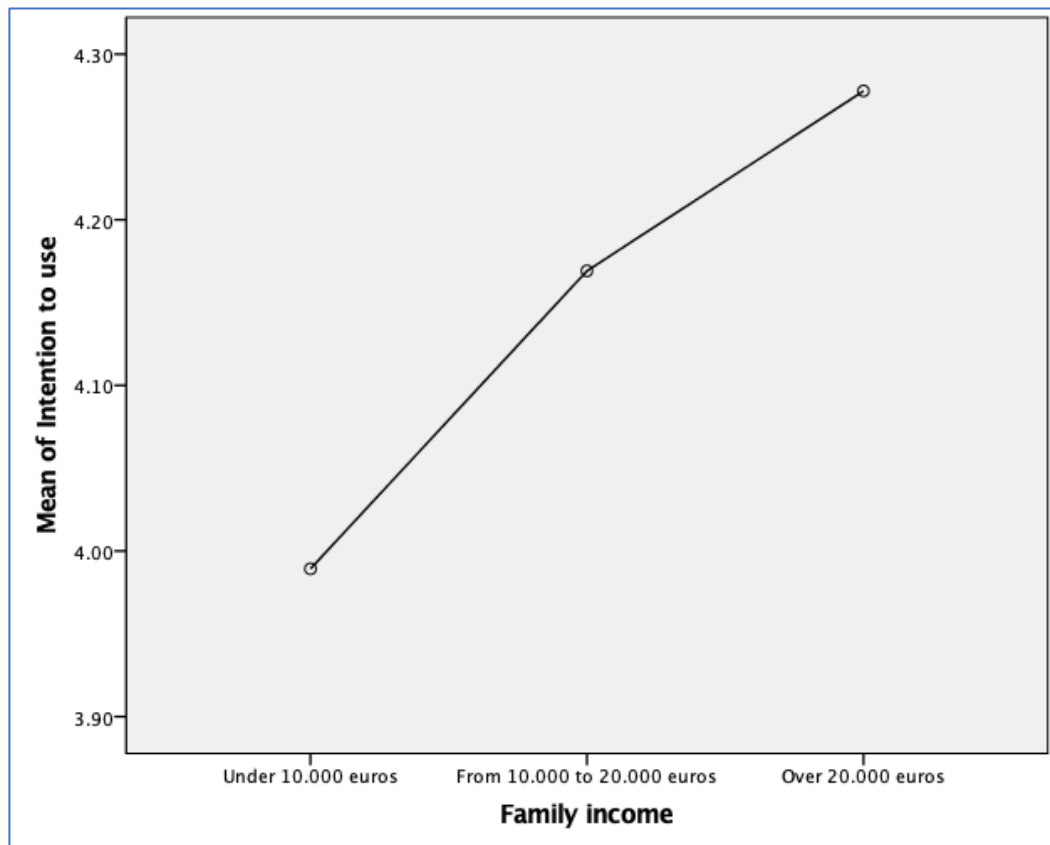
The findings from one way ANOVA suggest that the intention to use e-banking is higher for the respondents with family income over 20.000 euros (Mean= 4.27, SD = .371) and lower for those with income under 10.000 euros (Mean= 3.98, SD = .594).

Descriptives

Intention to use e-banking

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Under 10.000 euros	62	3.9892	.59435	.07548	3.8383	4.1402	3.00	5.00
From 10.000 to 20.000 euros	67	4.1692	.53615	.06550	4.0384	4.2999	2.00	5.00
Over 20.000 euros	12	4.2778	.37155	.10726	4.0417	4.5138	4.00	5.00
Total	141	4.0993	.55741	.04694	4.0065	4.1921	2.00	5.00

Additionally, $p = 0.045 < 0.05$, and as a result the family income of the respondents is a determinant factor of their intention to use e-banking ($F(2,138) = 2.397, p < 0.05$). Specifically, the higher the family income, the higher the intention of the consumers to use internet banking.



➤ Factors that affect the adoption of e-banking / Intention to use e-banking

Pearson Correlation show the existence of relationship among the factors that related to the intention to use e-banking. P is lower in all cases and as a result there is a positive correlation between the intention to use e-banking and the all factors, as well as there is a negative correlation pf perceived risk from internet banking use and the intention to use it ($r = -510, p < 0.05$).

Correlations

		1	2	3	4	5	6	7	8
1. Intention to use	Pearson Correlation	1	.352	.415	.400	-.510	.633	.305	.333
	Sig. (2-tailed)		.041	.025	.024	.015	.000	.048	.043
2. Perceived Enjoyment	Pearson Correlation		1	.064	.081	.006	.022	.016	.018
	Sig. (2-tailed)			.447	.342	.940	.794	.853	.829
3. Perceived Ease of Use	Pearson Correlation			1	.177	.026	.048	.074	-.009
	Sig. (2-tailed)				.035	.762	.570	.382	.912
4. Perceived Usefulness	Pearson Correlation				1	.017	.009	.150	.017
	Sig. (2-tailed)					.841	.915	.075	.839
5. Perceived Risk	Pearson Correlation					1	.026	.059	.022
	Sig. (2-tailed)						.761	.489	.797
6. Compatibility	Pearson Correlation						1	.131	.122
	Sig. (2-tailed)							.122	.148
7. Self-efficacy	Pearson Correlation							1	.056
	Sig. (2-tailed)								.510
8. Financial cost	Pearson Correlation								1
	Sig. (2-tailed)								

Chapter 4. Conclusions and Research Limitations

4.1. Conclusions

The research sample consists of 59.6% by males and 40.4% by females, the biggest percentage (34%) were from 26 to 30 years old, following by those above 25 years (27.7%), while almost half of the participants (48.9%) have a bachelor degree. Regarding the family income of the participants at the primary research, the majority of the sample (47.5%) have a family income between 10.00 and 20.000 euros while 44% under 10.000 euros.

Following the research questions it was found that:

1. Which potential e-banking adoption factors affect the intention to use e-banking services?

As confirmed by several previous research efforts (eg Chau & Lai, 2003; Dimitriadis & Kyrezis, 2011; Vainio, 2000; Lee, 2009), the intention to use electronic banking services was significantly affected by perceived ease of use electronic banking services, their perceived usefulness, perceived risk and, lastly, consumer confidence in the use of electronic banking services.

2. Which are the perceptions of Greek consumers regarding e-banking adoption?

Specifically it was found that:

- 86.5% think that e-banking enables them to complete my banking activities conveniently
- 85.8% states that E-banking services are not problematic all the time
- 73% think that e-banking is compatible with their lifestyle
- 75.2 is not confident when using e-banking without someone else around
- 46.1% state that using the e-banking allows them to save money
- 91.5% state that they believe that e-banking services will be part of their life in the future

Those findings are confirmed by several past researches (e.g. Dimitriadis & Kyrezis, 2011).

3. Which personal characteristics affect the intention of consumers to use e-banking services?

The statistical analysis showed that age determines the intention to use electronic banking services with participants under 30 years of age have higher intent to use electronic banking services than older ones, findings consistent with the Barnett survey (1998) . In addition, it was found that citizens' income is a factor of differentiation, and in particular those with a monthly income of more than EUR 2,500 are more likely to use electronic banking services than other participants, and these results are similar to those of Burney (2001) and Karjaluoto (2002). Finally, unlike the research by Laukkanen and Pasanen (2008), there was no differentiation in the intention to use electronic banking services by gender and on internet access from home.

4.2. Research Limitations

The main limitation of the research process can be considered to be the size of the sample with 141 participants being low in size over previous research efforts. In addition, a disadvantage is the sampling method in the absence of a catalog to cause problems with random sampling and representativeness of the results. However, the results of the research offer important findings and largely confirm a number of previous research efforts on the use of electronic banking services.

4.3. Research recommendations

In conclusion, the results of the survey have shown that increasing the use of online banking services should be given a special base for older age groups as they are most reluctant and less enjoyable than use. Therefore, promotional efforts that highlight the benefits of using online banking services could convince and attract more consumers in this direction. In addition, there is a negative impact on the potential risk of using banking services over the internet, which shows that if banking institutions can reduce the potential risk / risk that consumers assume when they use banking services over the Internet they will have a simultaneous an increase in the intention to use banking services over the Internet.

This research effort has presented important findings on the use of e-banking by Greek consumers and has identified the factors that can determine its adoption. Nevertheless, at the research level, improvements could be made and the current research expanded with new and more complete results. In particular, a future extension could be the investigation of e-banking combined with online shopping, as well as the ease of use of the banks' e-banking applications - and how this affects its adoption and continuation its use. Finally, on the banks side, it could be considered whether e-banking affects the bank's performance at an economic and operational level if its benefits in Greece are the expectations at the operational level if the influence is greater or lesser for a specific type of business.

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Appendix

QUESTIONNAIRE

This questionnaire includes questions regarding the investigation of the use of electronic banking by Greek consumers. Answers to questionnaire questions are confidential and your participation is anonymous. Thank you very much for your time.

Demographics

Gender

- ☐ Male
- ☐ Female

Age

- ☐ Under 25 years old
- ☐ 26 to 30 years old
- ☐ 31 to 45 years old
- ☐ Over 45 years old

Education

- ☐ Primary education
- ☐ Secondary education
- ☐ University
- ☐ Master
- ☐ PhD

Family income

- ☐ under 10.000 euros
- ☐ 10.000 to 20.000 euros
- ☐ Over 20.000 euros

Please answer the following questions when 1 = strongly disagree, and 5 = strongly agree.

Perceived enjoyment					
	1	2	3	4	5
Using electronic banking services offers me pleasure					
The use of electronic banking services is a pleasant process.					
Using electronic banking services is fun for me					
Perceived easy of use					
	1	2	3	4	5
For the use of electronic banking services I need specific skills that I can easily get.					
The functions of electronic banking services are easy to learn					
The benefits of using electronic banking services are easy to obtain					
How to use electronic banking services is easily recalled in my memory					
The use of electronic banking services is generally easy					
Perceived usefulness					
	1	2	3	4	5
The use of electronic banking services facilitates my day-to-day activities.					
I believe that the use of electronic banking services is helpful					
I believe that the use of electronic banking services is beneficial.					

I believe that the use of electronic banking services facilitates transactions with the bank I cooperate with.					
I consider that the use of electronic banking services greatly reduces the time of transactions with the bank					
I believe that the use of electronic banking makes my transactions with the bank more convenient.					
I believe that the use of electronic banking has made my collaboration with the bank more efficient					
Perceived risk					
	1	2	3	4	5
The use of electronic banking services has presented problems and malfunctions such as the slow speed of completion of transactions					
The use of electronic banking has led to erroneous transactions and performance problems					
The use of electronic banking has led to my concern for the proper conduct of a transaction.					
I think that in the event of an error, I will lose considerable time in correcting it.					
When using electronic banking services, I feel insecure to provide personal information.					
When using electronic banking services, I am afraid that third parties may gain access to my account					
Life compatibility					
	1	2	3	4	5
I believe that the use of electronic banking services is in line with how I have chosen to live					
I believe that the use of electronic banking services is in line with how I prefer to deal with the bank					

Confidence					
	1	2	3	4	5
I am confident in using electronic banking services without having to give someone directions					
I am confident in using electronic banking services without having used them in the past.					
I am confident in using electronic banking services without instructions for use					
Having seen someone else make use of my electronic banking services creates confidence					
Financial cost					
	1	2	3	4	5
Using electronic banking services saves money.					
The use of electronic banking services minimizes costs					
Intention to use					
	1	2	3	4	5
I intend to make use of electronic banking services for my transactions with the bank					
I intend to make future use of electronic banking services					
I would recommend the use of electronic banking services to others					

Thank you!!!